THE BUILDER

A RECORD OF ARCHITECTURE AND CONSTRUCTION.

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THE ORGANISATION OF ARCHITECTS IN THE NATIONAL INTEREST.

ARCHITECTURE is the most secret, and for that reason the most difficult, of the arts; its chief theory is the reduction to order of innumerable diverse conditions which, considered separately, attain to an exaggerated importance, although, when subjected to constructive criticism through the agency of a trained intellect, these very conditions fall easily into line, being allocated to form parts of a general conception. The practice of architecture can never attain to perfection; the exponent, however zealous, is always confronted with the difficulty of compromise, but years of experience and a sympathetic understanding of life smooth away many obstacles which to the tyro appear insuperable. We do not propose to theorise on the wide principles of architecture, or to discuss it in its dual capacity of science and art, or purely as an art; neither shall we postulate at this juncture concerning its insular or local development. Our contention at the moment is that the practice of architecture, by reason of its intricacies, has developed the logical powers of some four thousand established English architects, and that the majority of these gentlemen are in readiness to meet any demand the Government may contemplate by which their special knowledge can be afforded scope.

On the outbreak of hostilities many of the younger men left the drawing-board for the camp; others, whose responsibilities were more immediate, have endeavoured to complete the works they had in hand and to maintain the connections which years of unstinting labour had enabled them to form. In spite of criticism to the contrary, we have no hesitation in saying that there is nothing selfish in honest attempts to maintain the industry of a community in time of national stress; rather, such endeavours are to be regarded as conforming to the first laws of economy. On the other hand, it must be admitted that private work is diminishing every day, and that a large and extremely important class is faced in the near future with the problem of dire necessity. Under these conditions, and entirely disregarding those suggestions of artificial employment which are favoured in some quarters, it is only reasonable that we should employ the columns of this journal as a public platform from which to voice the growing demands of the architectural profession for organised employment in the national service. We hold no views or false illusions concerning charitable employment, or the expenditure of public moneys in order to promote competitions for future municipal buildings; such procedure as the foregoing could not act beneficially to the progress of the art, and if it came into action would result in unseemly scrambles. Notwithstanding such scruples, it can be assumed with certitude that the non-employment by the Government of such qualified men as exist in the architectural profession will militate very seriously against the doctrine of national economy. The body of architects are specialists; they have acquired their knowledge and experience after years of study, and they are skilled in the handling of men and materials; add to this an adaptability to meet new circumstances, and it will readily be seen how invaluable the services of such men would be if employed on Government work, especially if such work were in some degree familiar. We shall proceed to enunciate our views as to the manner of such employment, and to give reasons why the organisation of the profession for Government work is a matter of urgent importance to the State.

Lack of organisation, with its concomitant evils, slackness and unreadiness, is the chief cause of the present critical state of the country, which far-seeing Ministers are attempting to remedy by feverish improvisation. Little more than a year ago organisation on a great scale would have been scoffed at as interfering with the liberty of the individual; to-day it is welcomed. It is of little use to call attention to the mistakes made during the first days of the war, when the housing of the new armies was entered upon. The Government, in the first months of the war, ignored the architectural profession and forced a mass of extra work on the already sorely-tried War Office, with many evil consequences, which became apparent when the wooden towns sprang up and were occupied by the troops.

The architectural profession at that time, if it was considered at all, was doubtless regarded by the Government solely as a body of artists incapable of dealing with practical requirements; as a result, thousands of pounds were expended on ill-devised and badly-designed temporary buildings. The temporary augmentation of the ordinary War Office staff by a body of trained and practical architects would have resulted in the work being considerably expedited, and an enormous saving would have been effected. We are told that the number of garrison towns in the vicinity of the metropolis is to be permanently increased, necessitating the building of barracks and accommodation for troops on a great scale. Surely such an undertaking would be more successful were the services of the architectural profession organised for the work. Not only would it be possible to produce reasonably economical work, but designs of instructive style and of lasting value as works of art to the community. In the past the design of such magnificent works as the Victualling Yard at Plymouth, the Raglan Barracks at Devonport, and the old buildings at Woolwich was entrusted to architects and educated engineers, apart from the War Office staff; and we feel sure that prejudices could be overcome in view of the greater benefits which would inevitably accrue from enlisting the services of architects skilled in design. In any other country but England architectural advice at such a time as the present would have been taken. We record an incident which occurred some years ago in connection with the rebuilding of the American Naval College at Annapolis. The old buildings were very dilapidated and inadequate to their purpose, and the condition of the buildings prompted an architect, Ernest Flagg, to prepare a grandiose design for new buildings on a great scale. Flagg, unsolicited, sought out the naval authorities and told them "that the existing buildings were not fit to house dogs, without regard to drilling human beings therein." The result of this attack on the part of a private architect led to the adoption of his reasonable project and the erection of a magnificent naval college. We do not think an English architect would have the temerity to singe the beards of those who rule affairs from Whitehall; his proposals and plans would be treated with derision, and he would deem himself lucky to have them pigeonholed and not rudely returned to him. We have heard it said, "What are architects capable of doing besides building to help affairs to a successful issue?" Our reply is, the training of architects fits them for innumerable services, and many definite labours can be arranged for their activities. For example, some architects could teach young officers to sketch topography, to read maps correctly, and to understand the use of scientific surveying instruments; others could be attached to the staff of certain of the armies to act under the regular officers as military draughtsmen, and make maps and tracings of positions, and a further field could be opened up for architect billeting officers, who would be responsible for inspecting billets, reporting on sanitary conditions, and generally acting as inspectors, thereby relieving the ordinary officers from clerical work.

There are also many middle-aged architects who are thoroughly qualified for observation work at the front, for the construction of temporary hospitals in France and England, and such problems of water supply and field engineering as may arise in a war of such terrible dimensions as the present

emergency. It should not be imagined that we have omitted in our review the body of civil engineers who, we believe, have already organised their numbers against a Government call, and who are ready at a moment's notice to undertake duties connected with road and railway construction. As regards the architectural profession, their services would be of inestimable value on various duties connected with the lines of communication, the organisation of war material from the base to railhead and other clerical duties, and thus relieve qualified combatants. Even those architects still continuing in practice would doubtless be willing to undertake temporary clerical work at military headquarters. The same remarks apply with equal force to the naval branch of the national arm of defence, and we feel sure that some door will be shortly opened to admit of a responsible body of educated men materially to aid the fighting forces.

On strictly economical grounds it is at the same time of the utmost importance that the internal resources of the country should proceed even at a slow pace, and that building work with English goods should be encouraged by those in a position to develop properties and estates, if such work is only undertaken in a limited and cautious manner. With regard to the manufacture of munitions, we are informed that two eminent architects have been through a course of training at Woolwich Arsenal, and are now engaged as inspectors of munitions at a northern centre. The time is fast approaching when the whole of the intellectual resources of the nation will be called upon to aid in crushing the common foe; it has taken a year of strenuous excitement to awaken the country to a sense of the national peril, but there is happily time left to exert fuller energy. The architectural profession has already given thousands of young men to the Army and Navy; that it is ready to give the results of its matured training goes without saying, and it remains for the Government to select the right men, and to direct their activities into those spheres of action in which they can be most useful. We shall gladly welcome from our readers suggestions of possible employment for war purposes of these architects whose years and family responsibilities prevent their taking a place in the firing line, and we will give full publicity in our columns to any sensible proposals sent to us.

NOTES.

A County Architect.

A DISCUSSION took place recently at a meeting of the Kent County Council which illustrates the difficulties arising when the value of an architect's services is considered in terms of salary, and the advantages of the usual basis, which treats the remuneration for every building as a separate matter unconnected with questions of time, staff, or salary. Mr. Ruck was, we gather, at one time the County Surveyor, who, as we read between the lines of the discussion, probably acted in the capacity of County Architect also, but on April 1, 1904, he relinquished the title of County Surveyor for that of County Architect, with a salary arranged at £600 a year, to include his travelling and other expenses. The appointment left Mr. Ruck free to take private work, and his work included all county buildings except county asylums, schools, and educational buildings generally. On August 21, 1907, it was agreed that it would be better that bridges should be transferred to the County Surveyor's Department, but no change was made in the salary paid to Mr. Ruck. The Council recently rediscussed the whole matter, various members making proposals that the salary should be revised, and that varying sums of £400, £500, or other amounts should be paid Mr. Ruck, the Council paying his expenses. Eventually the matter was adjourned for further consideration, a wise proceeding, as no one among the various speakers seems to have made out a good case for his proposals, although all were happily in agreement as to the excellent manner in which the work had been done. The important point in all such questions is whether the authority obtains the most competent service possible, for if they do the exact amount of salary paid is entirely a secondary and unimportant matter; but, generally speaking, we believe that public bodies would be wise in their own interests if they paid fees on the work actually carried out, and relieved themselves of the invidious task of arriving at the fair salaries which should be paid, and also of the liabilities of paying a professional staff for work which, in the nature of things, must be more intermittent in its amount than the purely administrative work falling to a local authority.

France and the Panama Exhibition.

THE French Pavilion at the Panama-Pacific Exhibition at San Francisco is described as being the most remarkable feature of a wonderful display. The Pavilion is an exact reproduction of the famous Legion of Honour building designed by the architect Rousseau for the Prince de Salm, who was one of the first victims of the subsequent Revolution. Architectural details used in its construction are subsequently to be presented to the University of California for the use of the architectural department of the University. Rodin's "Thinker" occupies a prominent position in front of the Pavilion; while a statue of "Armed France," executed by Alfred Boucher, is placed inside the building. One of the features of the Exhibition is a very fine collection of Gobelins tapestry, old and modern, including examples of the work executed under Le Brun, the great director of the looms in the reign of Louis XIV.; while modern tapestry is represented by some fine work by M. Cormon, one of the most eminent French artists of the day, which portrays a scene in the career of the Duc du Berry, made for the town hall of Bourges, which in the fifteenth century was his capital. There are also designs which were not carried out for a series of tapestries illustrating modern battles, among them Yorktown and Bunker's Hill. The Exhibition naturally includes examples of Sèvres china from the works which were founded by Louis XIV. to compete with those of Dresden; but while much of the china is for sale, the specimens of tapestry are not. As we have pointed out frequently, the French organisation and encouragement of art have been of immense commercial advantage to the nation, and there is good reason to believe that a similar policy here would lead to similar results, which should appeal to a nation having the reputation of being practical; in other words, that the organisation of art, besides adding pleasure to our lives and beauty to our towns, may be made profitable to us commercially.

The Tomb of S. Augustine.

DETAILS regarding the finding of the tombs of S. Augustine and his five successors in the Archbishopric of Canterbury were recently given to members of the Kent Archæological Society on a visit to Abbey Field. The north aisle of the original church, built by Ethelbert and S. Augustine, has been recently excavated. This was the porticus of St. Gregory; and on the other side, beneath the building which served as the one washhouse of the Kent and Canterbury Hospital, was found the porticus of S. Martin, where the remains of Ethelbert and Bertha, Eadbald and his consort, and other royal personages were buried. In the porticus of S. Gregory were buried the first six Archbishops—Augustine, Lawrence, Melletus, Justus, Honorius, and Deusdedit, while the original grave of S. Augustine was found beneath the third pillar from the central tower of the nave of the later Norman church built by Abbot Scotland. The actual tombs of Lawrence, Melletus, and Justus were discovered, but the others were destroyed when the Norman foundation wall was built. In 973 Dunstan rededicated the Abbey Church of S. Peter and S. Paul and added the name of S. Augustine, and it has been held by many that rededication always meant extension. When the first six Archbishops were buried beneath the porticus there was no room for the seventh, and the conclusion arrived at is that the porticus was then enlarged by the addition of an apse. We are, in these days, continually finding definite evidence of the accuracy of early historical records, and enlarging the domains of historic fact by the addition of new ones which make an inroad into the confines of what was once regarded as legendary. The discoveries of late years have proved the existence of the early kings of Rome, while modern research confirms the accuracy of the observations of Herodotus and those of Dr. Schiemann, and others have rescued Troy from the position it once held as a legendary city, while the discoveries of Crete have given the Cretan rulers an actual place in history.

"How to Save."

UNDER this title a correspondent of the *Yorkshire Observer* writes a sensible reply to the hysterical outbursts of those armchair economists who have been urging a cessation of building. Why, he very pertinently asks, should the builder be made a national scapegoat? The writer says from his own experience he knows that the opposite policy is the direction in which economy lies, as when the buildings in devastated parts of France, Belgium, and Poland have to be rebuilt prices of all building commodities and labour will rise. Yorkshire has been taught for a generation to save and economise, and one of the favourite forms of saving is investment in building, with the result that more people in Leeds and Bradford own their own houses than in any other towns in the Empire. What is really required in the interests of economy is some temporary relaxation of laws and trade union regulations which press grievously on capital and labour, especially in the direction of the employment of male and female refugees, who should be allowed to earn their living in their own way, which would temporarily relieve the labour market at a time labour is scarce, and would also obviate the payment of less relief. We consider the letter very timely and apposite, for there is no doubt that the daily Press is suffering from acute hysteria, and pronouncing judgments on matters which they have not the adequate knowledge to deal with.

REST AND EMPHASIS.

EVERY enduring building must be in a state of stable equilibrium, yet its treatment may give us a predominating impression of rest or, on the other hand, of emphasis. Speaking generally, the various forms of architecture of the ancient world, including that of India, Egypt, Greece, and Rome, convey a strongly predominating sense of restfulness; while mediæval architecture is, broadly speaking, distinguished by an expression of energy or emphasis. It is not altogether a question of the form of masses, though these are important, as we have buildings in India with massive tower-like terminations which give the impression of restfulness quite as fully as the lines of the Parthenon or Coliseum. But when we analyse the manner in which Eastern forms are built up we shall find that the horizontal line predominates, and, as a rule, the effect is created by a number of horizontal stories superimposed upon one another. Nor does the sloping mass of an Egyptian pylon convey an impression of energy in spite of its unbroken lines; power is there, and majesty, but it is markedly restful in effect, and a fitting adjunct to the repose and solemn splendour of the areaded halls and chambers beyond. But in mediæval architecture everything except the upward force of the strongly-marked vertical lines of composition seems subordinate to the factor of vertical expression, and, in combination with the pointed arch, suggests energy and emphasis. Naturally, both elements are present in buildings of marked architectural expression, but they are seldom evenly balanced in great work, the æsthetic effect of which requires the subordination of one or other quality. If we stray too far in one direction the result is a depressing sameness and sense of intolerable weight and monotony; if we transgress in the other, a sense of size and composition is eliminated, and we lose the quality of emphasis in the defect of unrest. Nothing could present a stronger contrast than the horizontal masses of the entablature of a Greek temple and the vertical lines of the columns emphasised by open space between them. Yet the impression of rest created by the long horizontal lines of steps and stylobate predominates, and the whole effect differs only a degree from the extreme note struck in Egyptian design. In the architecture of Rome, despite the use of the arch and the frequent subordination of the Orders to mere decorative functions, the whole note is one of restfulness. The emphasis in classical architecture is expressed rather in detail than by a larger note, and the legacy of Rome in this respect was adhered to in the great bulk of the Italian Renaissance. In this respect the Italian mind saw architecture from a different standpoint from the architects of the French Renaissance, who, throughout its long history, have delighted in the emphasis given by masses of different heights, by dormers and attics, and every device by which freshness and variety was introduced into the Italian theme without for the most part falling into the fault of introducing too small a scale into design or suggesting unrest. In our own insular rendering of the Renaissance we have, in accepting a prevailing Palladian note, rendered into an English variant by Wren and Chambers, used less emphasis than is found in French composition. If the building is large, the note of emphasis is usually conveyed by a pedimented portion; if small, by the employment of great richness in and round a doorway, as we find in the characteristic examples of St. Mary-le-Bow and the north and south entrances of St. Paul's; while the door is the one marked feature which breaks the expression of rest in many a smaller Georgian composition, saving it from tameness or monotony.

The Spaniard, like the Frenchman, felt the charm of emphasis in design, but conveyed it by a different method—that of extreme richness set off by comparative bareness of surrounding surfaces—a note which has great advantages which have hardly been sufficiently exploited in the architecture of other countries, as it has the great merit of concentrating the observer's attention on the beauty of richness in detail without conveying a sense of confusion or redundancy. Spanish buildings, both in Spain and in the old Spanish possessions, afford masterly exemplifications of the value of extreme emphasis without unrest—a trait which is probably, in part, due to the Saracenic influences which modified both the Gothic and Renaissance architecture in the Peninsula.

The architecture of the Baroque is pre-eminently the architecture of vigorous emphasis, and it is unfortunate that too much attention has been given to its defects in detail and too little to the architectural quality of the means by which the general expression is conveyed. Defects of differing national artistic temperament show themselves in the manner in which the quality of emphasis is conveyed in building, and those defects are often evident, both in mediæval art and work of a subsequent period. For example, the typical English cathedral suffers from the want of a sufficient definition or emphasis in the composition of the typical west front. There is seldom anything which quite takes the place of the great triple portals of a French cathedral, and though the large west window does so partially, we often feel that greater emphasis in the window is needed to give a stronger note of interest to the composition. In the same way, the greater length of the English plan is not so emphatic as the expression of height in the French cathedral; while the east window hardly affords so dominant a note as the French *chevet*.

Smaller English buildings, whether ecclesiastical or secular, are often more satisfactory than the greater works of architecture, because they require less emphatic expression to sustain interest; while the French have always been at their best in the expression of the dramatic possibilities of great buildings, of which the Palace at Versailles is a notable exception.

In our modern buildings the tendency is to use the central feature too frequently in a long front, somewhat neglecting the opportunities given for effect by a composition only emphasised at either end, which is amongst the most effective means of using emphasis and contrasting it with the expression of rest in the centre portion of a façade, and in many of our buildings we approach too near the dangerous defect of cutting up our fronts into equal thirds. The strong point of the architecture of the Regency, especially that of Nash, was that the principles of emphasis and rest were well understood and practised, and for that reason it affords a valuable study for the modern designer, who will find that there are few principles of composition which will better repay careful study than the problem of rest and emphasis expressed in terms of three dimensions.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS:

THE EXAMINATIONS.

Preliminary.

THE Preliminary Examination, qualifying for registration as Probationer R.I.B.A., was held in London, Bristol, and Manchester on June 8 and 9. Of the eighty candidates admitted, thirty-six were exempted from sitting, and the remaining forty-four examined, with the following results:—

Centre.	Examined.	Passed.	Relegated.
London	27	18	9
Bristol	8	5	3
Manchester	9	5	4
	44	28	16

The passed and exempted candidates — numbering together sixty-four—are as follows:—

H. M. Aitchison, Brighton.
F. W. H. Allison, Leeds.
G. Anderson, Norwich.
M. H. N. C. Atchley, Bristol.
W. C. Ayers, Bradford.
N. A. Barber, Derby.
J. A. Bateman, Hampstead.
H. E. Bennett, Cheltenham.
C. A. Benson, Cardiff.
H. E. Booth, Brighton.
C. R. Brown, Colchester.
C. Burkitt, London.
R. Byrom, Bury, Lancs.
A. K. Chaudhuri, London.
W. E. Cross, London.
D. O. H. Davies, London.
L. M. Evans, Birmingham.
H. Fieldsend, Pontefract.
N. C. Fisher, South Ascot.
A. R. Goldthorp, Halifax.
A. Green, Oakworth, near Keighley.
E. H. Hardy, London.
S. G. S. Harris, Parkstone.
J. M. Harvey, Glasgow.
A. A. N. Haywood, London.
A. C. Holliday, Leeds.
C. R. Hollingsworth, Barnsley.
J. M. Honeyman, Edinburgh.
E. K. D. Hughes, Bournemouth.
R. Jepson, Derby.
C. L. Jones, Newport, Mon.
S. S. Kelly, Co. Dublin.
F. O. Lawrence, Liverpool.
H. M. Lawrence, Tamworth.
E. M. Lawson, Chester-le-Street.
E. W. Lewis, Weymouth.
T. L. Marshall, Cambridge.
H. A. Medd, Abingdon.
W. T. Morgan, Maesteg.
L. G. Morrow, Berkhamsteed.
J. Napier, Glasgow.
C. Noble, Manchester.
H. W. Papworth, March.
G. H. W. Peever, Shrewsbury.
H. V. W. Pite, Ealing.
G. R. H. Rogers, Swansea.
K. W. Rose, Halesowen.
H. W. Schofield, London.
R. P. Shaw, Linlithgowshire.
C. Slater, Derby.
D. F. Somerset, Fiji.
J. Steveneson, Ayr.
H. J. Stribling, Slough.
C. P. Tanner, Newcastle-on-Tyne.
G. S. Taylor, Kirkcaldy.
A. Treharne, Briton Ferry.
C. C. Vine, Exeter.
A. Waddicar, Bolton.
F. V. Ward, Fiji.
V. E. Ward, Swansea.
S. Westgarth, Cardiff.
F. J. White, Exeter.
A. Williams, Ogmore Vale, Glam.
J. H. Yardley, Stourbridge.

Intermediate.

The Intermediate Examination, qualifying for registration as Student R.I.B.A., was held in London, Bristol, and Manchester from June 4 to 11. Twenty-one candidates entered, with the following results:—

Centre.	Examined.	Passed.	Relegated.
London	13	5	8
Bristol	3	2	1
Manchester	5	2	3
	21	9	12

The passed candidates are as follows, the names being given in order of merit:—

A. T. Philp, London.
B. T. Francis, St. Austell.
H. A. Johnson, Blackburn.
J. G. Warwick, Peterborough.
H. E. Todd, Almondsbury, near Bristol.
H. Bannister, London.
G. G. Winebaum, London.
H. Metcalfe, Blackburn.
J. A. Emes, London.

The number of failures among the relegated candidates was as follows:—

A. Principal Styles and General History of Architecture	1
B. 1. Simple Applied Construction	8
B. 2. Theoretical Construction	8
C. 1. Historical Architecture:—	
(a) Greek and Roman	2
(b) Byzantine and Romanesque	—
(c) French and English Gothic	—
(d) Italian, French, and English Renaissance	—
C. 2. Mathematics and Mechanics	1
C. 3. Design	5

Exemptions from the Intermediate.

The following Probationers, having produced satisfactory evidence of their training and qualifications, were exempted from sitting for the Intermediate Examination, and have been registered as Students:—

B. N. Dey, Glasgow. (Government C.E. College, Sibpur.)
B. L. Dhama, Bombay. (University of Allahabad.)
T. F. Ford, London.
W. Gourlay, Glasgow. (Glasgow School of Architecture.)
T. C. Hardy, Glasgow. (Glasgow School of Architecture.)
J. M. Honeyman, Edinburgh. (Glasgow School of Architecture.)
F. O. Lawrence, Liverpool, (Liverpool University.)
E. Louy, London. (King's College.)
J. Napier, Glasgow. (Glasgow School of Architecture.)
R. P. Shaw, Linlithgowshire. (Edinburgh College of Art and Heriot Watt Colleges.)

In accordance with the special concession granted by the Council to Probationers on military service who are candidates for the Intermediate Examination and whose Testimonies of Study have been approved, the following were also exempted:—

S. Barlow, Aldershot.
H. Berry, New Barnet. (Queen Victoria Rifles.)
H. Burleigh, Hastings. (University of London O.T.C.)
T. L. Daniel, Ilford. (Royal Naval Air Service.)
A. R. C. Eaton, London. (Bedfordshire Regiment.)
D. C. Hall, Leeds. (Army Service Corps.)
H. J. Hall, Penarth. (Glamorgan Yeomanry.)
W. B. Hall, London. (Royal Fusiliers.)
W. Hope, Northumberland. (St. John's Ambulance Brigade.)
R. Hunt, Oxford. (Oxford and Bucks Light Infantry.)
H. E. Jarvis, Huddersfield.
H. E. Larkin, London. (13th County of London Territorials.)
F. W. MacKenzie, Seven Kings. (Middlesex Regiment.)
R. E. Mansfield, Leigh-on-Sea. (Royal Engineers.)
C. J. F. Martindale, Carlisle. (Royal Engineers.)
J. F. L. Mercer, Blackburn. (Royal Engineers.)
E. A. Ramsden, Leeds. (West Yorks Regiment.)
W. J. Reed, Blaydon-upon-Tyne. (Royal Naval Air Service.)
F. W. Rees, Pontypridd. (Royal Engineers.)
G. D. Shields, Bradford. (Royal Engineers.)
A. Smith, Luton. (Royal Engineers.)
J. A. C. Taylor, Oldham. (10th Bn. Manchester Regiment.)
H. F. Wharf, Hull. (East Yorks Regt.)
R. C. White, Aylesbury. (Royal Bucks Hussars.)
P. J. Williams, Carmarthen. (Welsh Regiment.)
T. S. Wood, Handsworth Wood. (Royal Field Artillery.)

Final and Special.

The Final and Special Examinations were held in London from June 24 to July 2. Of the fifty-two candidates examined, twenty-seven passed, and the remaining twenty-five were relegated. The successful candidates, given in alphabetical order, are as follows :—

P. J. Adams, Woodford.
H. Andrew, Hull.
P. F. Balsara [*Special*], London.
J. Bennett, Glasgow.
R. Bruce [*Special*], London.
E. G. Catchpole, Ipswich.
A. M. Duncan [*Special*], Dumbartonshire.
E. C. Francis, London.
J. S. Fyfe, Sheffield.
J. H. Horniman, London.
S. H. Loweth, London.
R. W. Maclaurin [*Special*], London. (Auckland, N.Z.)
P. H. Meldrum [*Special*], London. (Melbourne.)
C. H. Mitchell, London. (Auckland, N.Z.)
E. P. B. Musman, London.
C. E. Nichols, Sheffield.
C. L. Pace, London.
T. Reive, Manchester.
M. D. Robertson, London.
A. D. Robinson, Thorpe-le-Soken.
H. R. Sayer, Southampton.
* K. Takekoshi, London.
A. I. Turner, New Barking.
H. F. Walker, London.
J. H. Wardrop [*Special*], London. (Melbourne.)
E. Williams, Cardiff.
W. C. Young, Heaton Moor.

The number of failures among the relegated candidates in the Final Examination was as follows :—

A.	Design	12
B.	Construction—	
	(1) Foundations, Walls, Roofs, etc.	17
	(2) Iron and Steel	19
C.	Hygiene	19
D.	Properties and Uses of Building Materials	9
E.	The Ordinary Practice of Architecture	13
F.	The Thesis	3

The Final : Designs Approved.

The Board of Architectural Education announce that the designs submitted by the following Students have been approved :—

Subject XXI.

(a) *Design for a bandstand in a public park.*

Brandon, C. J.
Dartnall, J. A.
Day, N. F. C.
Duncan, R. A.
Hutton, L. D. H.
Kellock, A. D.
Munguia, G.
Reixa, F.
Tranmer, F.
Tubbs, G. B.
Wilkinson, F.
Woodhouse, F. G. M.

(b) *Design for a hostel for male students on a detached suburban site.*

Sunter, M. C.
Taylor, R. V.
Vinden, G.
Wilson, J.

ARCHITECTURAL SOCIETIES.

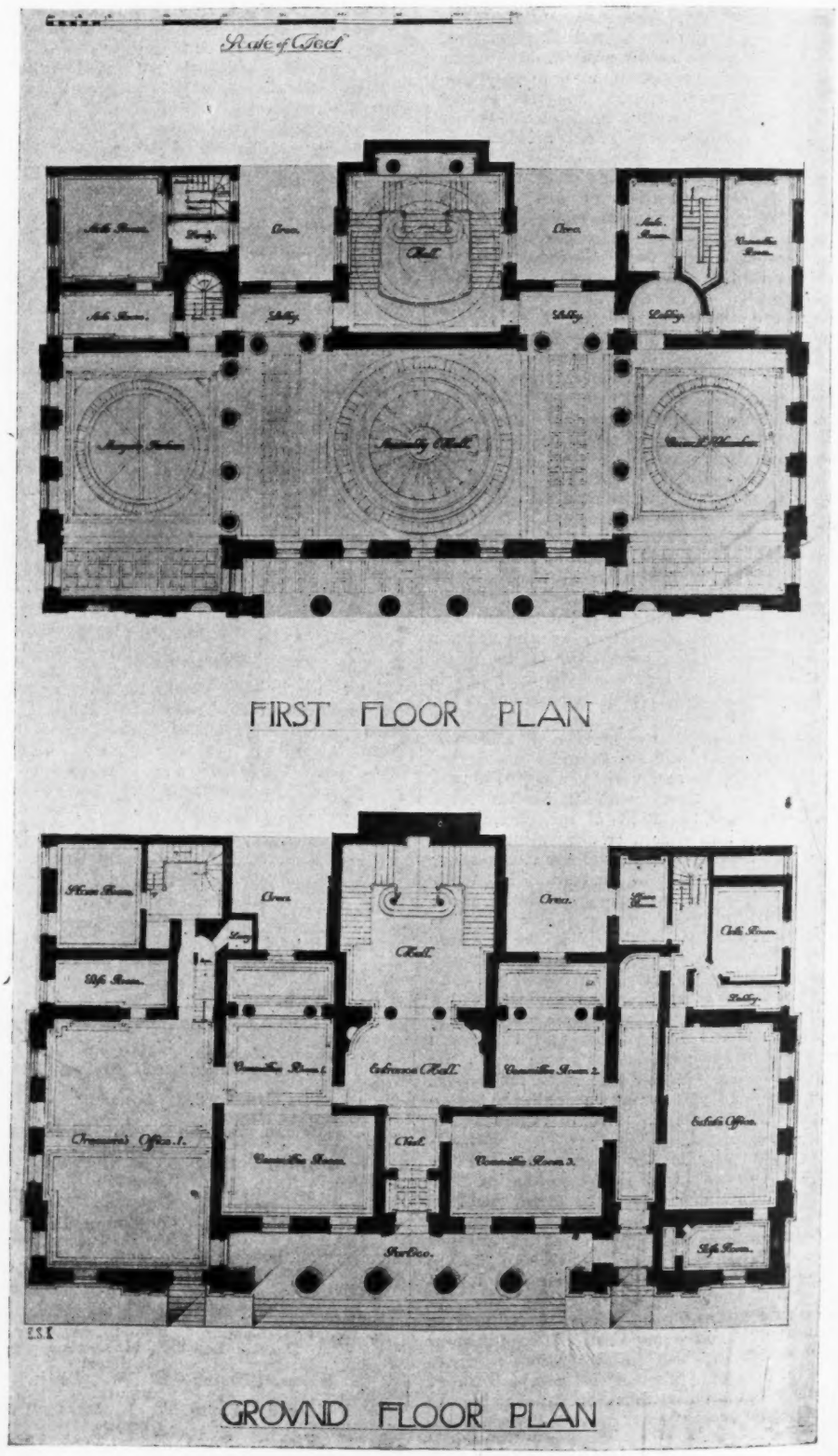
Nottingham and Derby Architectural Society : Visit to West Bridgford and St. Peter's Churches.

The Thoroton Society, in conjunction with the Nottingham and Derby Architectural Society, made an excursion to West Bridgford on August 11.

Mr. Harry Gill, in the course of a paper on the ancient part of the parish church, said that the earliest written reference to the church was in the Taxation Roll of Pope Nicholas IV., but there was unmistakable architectural evidence that part of the present work was executed at least 100 years earlier. This evidence was to be found in the lower part of the rubble walling, which was of skerry on water stone, obtained most probably from the Mapperley hills. Windows indicated thirteenth-century work, or as early even as the reigns of Richard I. or John. During the reign of Edward III. (1327–1377), village churches throughout the land were enlarged or rebuilt to meet the needs of the more elaborate ritual then in vogue. Bridgford Church was not pulled down, but was transformed by the addition of larger windows and the introduction of a rood screen and loft and other internal adornments. The stone altar, built into the eastern wall and destroyed at the Reformation, was replaced in Elizabeth's reign by an oak communion table. This was still in use in the side chapel, and the church also possessed a paten bearing the hall mark of 1564–5. The crudeness of the figures on the screen set up about 1380 suggested that the work was that of the village carpenter or mason. This was what made the church particularly interesting —that it was not built under monastic influence or by a trained band of itinerant craftsmen, but by village workmen under the direction of the squire. Externally, the charm of the old church was now somewhat overshadowed, but interest might still be aroused by the tracery of the eastern windows, the grotesque gargoyles, the carved stone in the south face of the tower, and a collection of eighteenth-century head-stones in the graveyard, obtained from the Swithland slate quarries in Leicestershire.

The company also visited St. Peter's Church, where Mr. Robert Evans, F.R.I.B.A., gave an account, not only of the church, but of what is being done in the way of restoration. Mr. Evans, in sketching the history of the edifice, said it was disappointing to find no mention of the building in Domesday Book. The foundation deed of Lenton Priory was the first record we had, in 1100. The south arcade was the oldest portion, and was a fine example of the Early English period, probably about 1180. There were no signs of Norman work, and in the various phases of restoration no Norman remains had been found. The original stone staircase to the old rood loft was one of the most interesting features. The north arcade was a much mutilated example of Early English work—probably about the end of the fourteenth century. The chief damage was caused to it by the erection of galleries, which were removed in 1887. Touching upon the work of restoration, the lecturer remarked that five centuries' exposure to rain and sun had left its mark upon the tower and spire, but fortunately the men who selected the stone of which it was built did so wisely, and if succeeding generations were alive to their trust we might expect it to remain a landmark for many years to come. Originally the spire was crocketed, but ninety years ago the crockets were sawn off by a mason named Philip Wooton. The apex of the spire had for many years looked new, being of a lighter colour than the rest of the stonework. The present works of repair and renewal were long overdue. There was no mortar in the joints of the spire masonry within 2 in. of the face, and a great many of the joints were without any mortar, the rain driving through, with the result that the joints had become very wide through the perishing of the stone. The stonework at the apex, which was cracked and badly weathered, had now been entirely removed and rebuilt in Derbyshire stone of a colour and composition more closely resembling the original stone. The walls of the tower were about 3½ ft. thick at the ringing

* Under a special Regulation this gentleman, being a foreign subject and not eligible for membership, will be granted a Certificate.



Manchester Old Town Hall : Plans.
From "Manchester School of Architecture Sketchbook." (*See page* 137.)

chamber level, and stones as large as 3 ft. 8 in. long were used in their construction. The four pinnacles crowning the four angles of the tower evidently became badly decayed a long time ago and were restored, but these in turn became dangerous and the remains were taken down and placed in the churchyard. The pinnacles that had now been placed in position followed the lines of the old ones and were 7½ ft. in height. In the tower there was a well-constructed groined ceiling, and in the centre was a covering on which were depicted the emblems of St. Peter—the cross keys and the head of a pastoral staff. The south face of the tower was more badly weathered than the others, and the buttress weatherings had in some cases almost entirely disappeared.

COMPETITION NEWS.

It must be understood that the following paragraph is printed as news, and not as an advertisement; and that, while every endeavour is made to ensure accuracy, we cannot be responsible for errors that may occur.

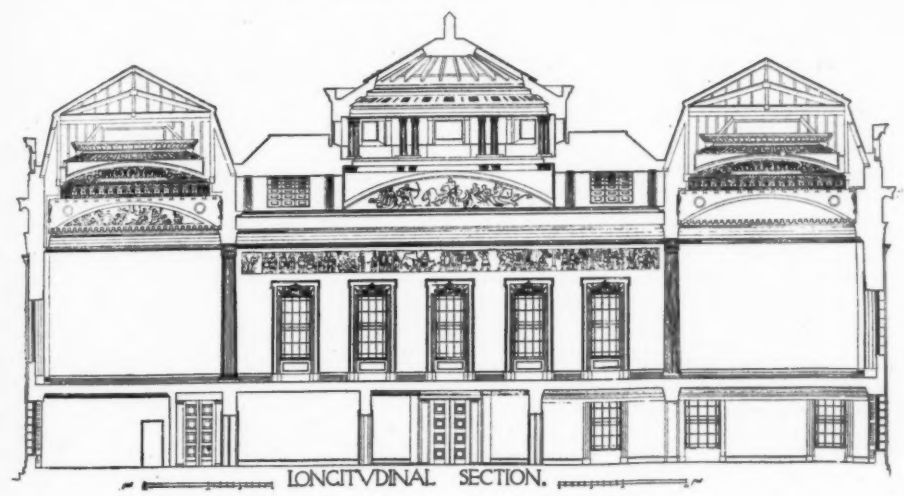
The list of current Competitions is printed on page 148.

Town Planning Scheme, York.

The Town Planning Committee of the York City Council invites competitive designs under the Housing and Town Planning, etc., Act, 1909, in connection with certain areas within and without the City of York. Conditions, instructions, and plan can be obtained from Mr. F. W. Spurr, the City Engineer, Guildhall, York, on payment of two guineas, which will be returned on receipt of a bonâ-fide scheme. Premiums of £100, £50, and £35 respectively will be awarded by a competent assessor. Schemes must be sent in on or before November 30, 1915.

"Normans," Rusper: Entrance, Archway, and Drive.

Mr Guilford W. Dudley, Architect.



LONGITVDINAL SECTION.

TRANSVERSE SECTION.

Manchester Old Town Hall.

(From "Manchester School of Architecture Sketchbook.")

BOOKS.

Manchester School of Architecture Sketchbook. (Manchester: The University Press. Nineteen plates. 10s. 6d.)

We recollect previous publications in the form of sketchbooks of Manchester students' work giving promise of future issues after the pattern of No. 1, which has never been realised to the extent of more than one or two volumes. We have again in the sketchbook before us the first of a new series. It is so much in advance of its predecessors that its continuation is not only more probable, but very much to be desired. The present volume is of high value both educationally and historically. In place of the miscellaneous collections of students' work, with a range covering most of Europe and all conceivable styles of draughtsmanship, such as have gone to the making of its predecessors, we have a valuable monograph containing a series of drawings and photographs, which form an exhaustive study of a building of supreme quality, the old Town Hall, Manchester, now, unhappily, lost. We illustrated this building several times at the time of its demolition two or three years ago, when, it will be remembered, the façade was re-erected in Heaton Park. Although its indebtedness to the Erechtheion was more thorough than was usual even in its own time, when Greek detail was revered to the point of actual reproduction, this work of Francis Goodwin had much originality and daring in its conception, while its refinement and scholarship were of the highest order. The beauty of its interior, only unveiled when the bookshelves were removed during its destruction, made that destruction appear the greater act of vandalism.

The drawings contained in the sketchbook, numbering seventeen plates, supplemented by two sheets of photographs, are a careful and accurate record in an entirely unaffected and lucid style of drawing. But for a noticeable want of figured dimensions, the plans and sections are clearness itself, and the beautifully rendered drawing of the front elevation gives the subtle modelling most sympathetically. If only for the sake of completeness, the side elevations should have been shown. There is a want of unity in the drawings of the sections, but they show very clearly the rich treatment of the ceiling of the finely-proportioned interior. Perhaps the most valuable of the drawings are the sheets of details. The delicate mouldings are given to a good scale, though they are here and there rendered somewhat unintelligible by the way in which the profile is coloured, so that in some cases it is difficult to see which side of the line gives the profile of the moulding.

"Normans," Rusper: Entrance Hall.
Mr. Guilford W-Dudley, Architect.

The sheets of ornament are well drawn, especially in the Howcroft's work, though there is some unnecessary repetition due to the fact that the work of three or four different men is illustrated. Most of Plate XV., for instance, is quite adequately shown on Plate X. The careful delineation of such good detail must have been invaluable to the students of the University.

We must add a word of praise for the production of the sketchbook. The printing and the paper are in every way worthy of the material. It is unfortunate that such excellent matter should be introduced by such a loosely-written and meagre description.

A prefatory note by Professor Dickie forecasts future issues which, we are glad to understand, will illustrate others of the fine series of Manchester buildings of the period of the grand style.

BOOK RECEIVED.

THE STORY OF WARSAW. By Rothay Reynolds. (London: Hutchinson & Co. 1s. net.)

GENERAL NEWS.

Victoria and Albert Museum.

The exhibition of sculpture by Ivan Mestrovic, now on view at the Victoria and Albert Museum, will be closed early in next week. The bronzes by M. Auguste Rodin, at present on loan to the Royal Scottish Academy at Edinburgh, will shortly be replaced in the West Hall.

Curious Foundations.

Mr. Henry Lovegrove, F.S.I., A.R.I.B.A., District Surveyor of Islington (South) and Shoreditch, informs us that he is supervising structural alterations in the Islington portion of his district to a terrace of houses erected more than 200 years since, and he was surprised to find that the bases of the walls stood on planks without any other foundation. The planks are in a better state of preservation than one would expect, and are mostly deal, while one or two may be chestnut or elm.

The Star and Garter, Richmond Hill.

At the instance of Mr. B. I'Anson Breach, of Messrs. Farebrother, Ellis, & Co., the Auctioneers and Estate Agents' Institute have acquired for £21,500 the freehold of the Star and Garter Hotel for presentation to the Queen as a hospital for permanently disabled soldiers and sailors. The cost of remodelling the interior, with equipment and upkeep, for nearly 200 patients is estimated at £30,000. Contributions in aid are invited by the British Red Cross Society, to whose charge the hospital will be committed.

Building Trade Restrictions.

In consequence of the restriction of building work by public bodies and the refusal of loans for housing purposes by the Public Works Loans Board, a statistical report has been issued by the National Associated Building Trades Council showing, approximately, the number of men of military and non-military age still likely to be affected by any general stoppage of employment in the building trade. Men nineteen years and over total 1,148,869, of whom there are eligible by age for service, 865,098. Not eligible by age, 283,771.—*Morning Post.*

"Halifax."

An illustrated handbook has recently been issued under the auspices of the Halifax Chamber of Commerce, Halifax Chamber of Trade, and Halifax Advertising Club, concerning the town's present position and future promise. It is an interesting commercial guide, showing the vast range of work produced from this centre, and demonstrating the advantages of the town's position. The book is published by Messrs. Sells, Ltd., 166–169, Fleet-street, London, and the price is 2s. 6d.

Apothecaries' Hall, London.

The quaint old Mill House of the Apothecaries' Hall in Water-lane, Blackfriars, will shortly be pulled down for a widening of that thoroughfare, opposite the end of Union-street. The Society's first hall and dispensary were at the suit of Gideon Delaune, his own apothecary; King James I. granted a charter of separate incorporation, dated December 6, 1617, to the Apothecaries, who founded their dispensary in 1623, and for ten years had been attached to the Grocers' Company. Their first hall and dispensary was established upon the present site in 1633, and, it seems, in "Cobham House," the Lady Howard of Effingham's property, which they adapted to their own requirements in what was then Blackfriars-lane, within the precincts of the former Dominican Friary. The hall, dispensary, laboratories, and other premises, as rebuilt by the members in 1676–7, were improved and enlarged in 1786. The new hall is described, in 1695, as being "seated almost opposite to the Paved Alley [since Union-street] that leadeth to the Ditch Side [the Fleet] down steps against Bridewell bridge." The "Mill House," recently superseded with a new factory, contained many curious appliances for the grinding and other treatment of drugs by hand-power, now rendered obsolete by the introduction of machinery; the windows were glazed with the old-world bull's-eye quarries.

OBITUARY.

Mr. W. D. Blessley.

Mr. Walter Douglas Blessley, of The Rectory, Bedwellty, Mon., and of Llanishen, Glamorgan, who recently died, aged seventy-five years, practised in Cardiff as an architect and surveyor, and was formerly an Associate of the Cardiff, South Wales, and Monmouthshire Architects' Society, and a member of the Cardiff City Council. He has left estate of the gross value of £50,383. Mr. Blessley was the architect of the enlargement and improvement of Llanishen Parish Church, adding the nave, new chancel, north aisle, and clergy and choir vestries, a few years ago, at a cost of more than £2,000, and of the Llanishen and Livaine National Schools.

Mr. G. A. Ramsay.

The death, in action in the Dardanelles, is announced of Mr. Gilbert A. Ramsay, Superintendent of the Glasgow Art Galleries and Museums, aged thirty-five years. Mr. Ramsay, a son of the late G. A. Ramsay, of Greenock, builder, studied architecture at the Glasgow School of Art; in 1907 he was appointed assistant to Mr. Aitken, Director of the Whitechapel Art Gallery, whom he succeeded there in 1911. In May last year he was appointed Superintendent of the Glasgow Art Galleries and Museums, and in October enlisted in the 6th Highland Light Infantry.

"Normans," Rusper: Dining-Room.
Mr. Guilford W-Dudley, Architect.

CORRESPONDENCE.

Second Thoughts about Economy.

SIR,—It is to be hoped that some members of the Government may read your leader of August 13 last, that it may suggest the need for reflection, and the exercise of wisdom before the issue of any further "literature" for the guidance of the public.

The silly cry of "Business as usual" being played out, we are now asked to adopt the battle-cry of "Stop imports," which is equally stupid, as it stands without qualification. For example, we need machinery and machine tools for the manufacture of munitions, and, being unable to obtain a sufficient supply in the home market, some enterprising firms have obtained agencies for Scandinavian, American, or other foreign plants; but, the Government having sanctioned the battle-cry of "No imports," the patriotic factory builder refuses to buy anything which is not "British made." The consequence is that we shall have to wait another twelve months for the munitions said to be urgently needed at once. On the other hand, the patriotism which is killing the building trade is not the cry of "No imports," but the recommendation of a Committee, appointed by the Government, that no one should build a house to live in, and the almost despairing appeal to everyone to hoard every penny because it may be needed by the Government as a "silver bullet."

Adverting to your reference to Stepney to illustrate your point of view, I agree that the extra ½d. rate should not be the consideration, but I think it would be unwise to start building at the present time on this class of work.

At the present time the difficulty to be contended with is shortage of labour and not unemployment, therefore it is well to watch carefully and properly organise the commencement of new works, so that those of the greatest public utility may be carried out first and those of lesser importance shelved for the time being.

On the other hand, there is a very serious want of employment amongst the brain-workers, and particularly in the ranks of practising architects. Surely the sane policy to adopt is that which appears to be the policy of the Stepney authorities, viz., to carry out all the necessary legal and administrative details, prepare the drawings and all preliminary work, in order that building may be started at any time when the demands of the labour market most need attention. This seems to me to be the right and proper procedure, inasmuch as it gives employment where it is needed at the present time—to professional men—and paves the way to meet the future needs of the labour market when the victorious fighter returns to civil life.

I would go much further than the opinions expressed in your leader with regard to the cost of the war and the benefits to be derived from the lessons it will teach us.

If the war really does open our eyes to our shortcomings, the lesson will be cheap at the cost of 100 millions per annum.

If the war teaches us that

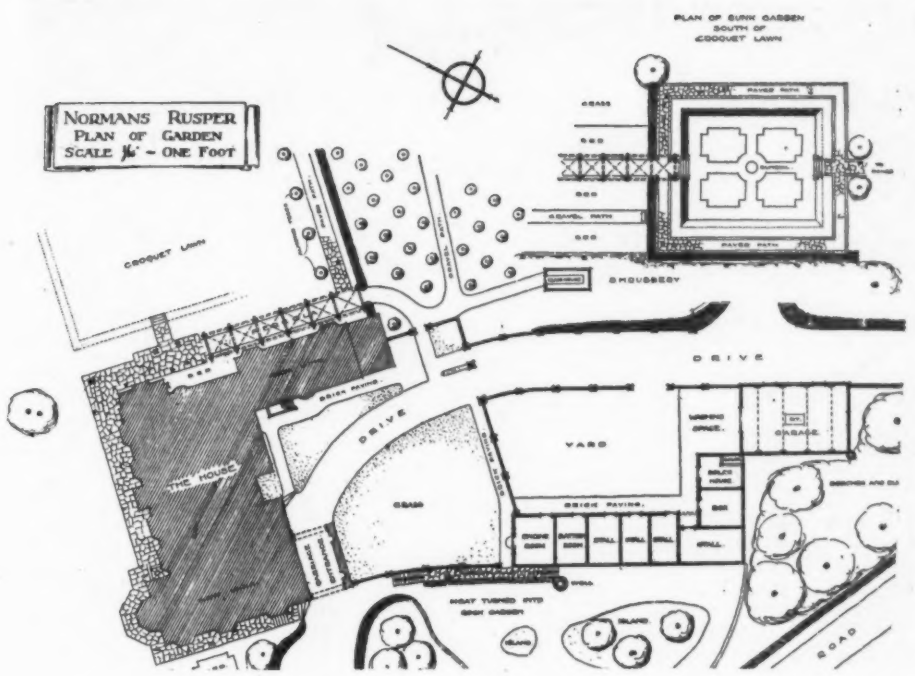
1. The unfair exploitation of the masses is unpatriotic,
2. The restriction of output by the worker is unpatriotic,
3. There is no patriotism where willing sacrifice is withheld, and that
4. We shall have sense enough to carry out the large programmes of social reform which have been talked of for a generation,

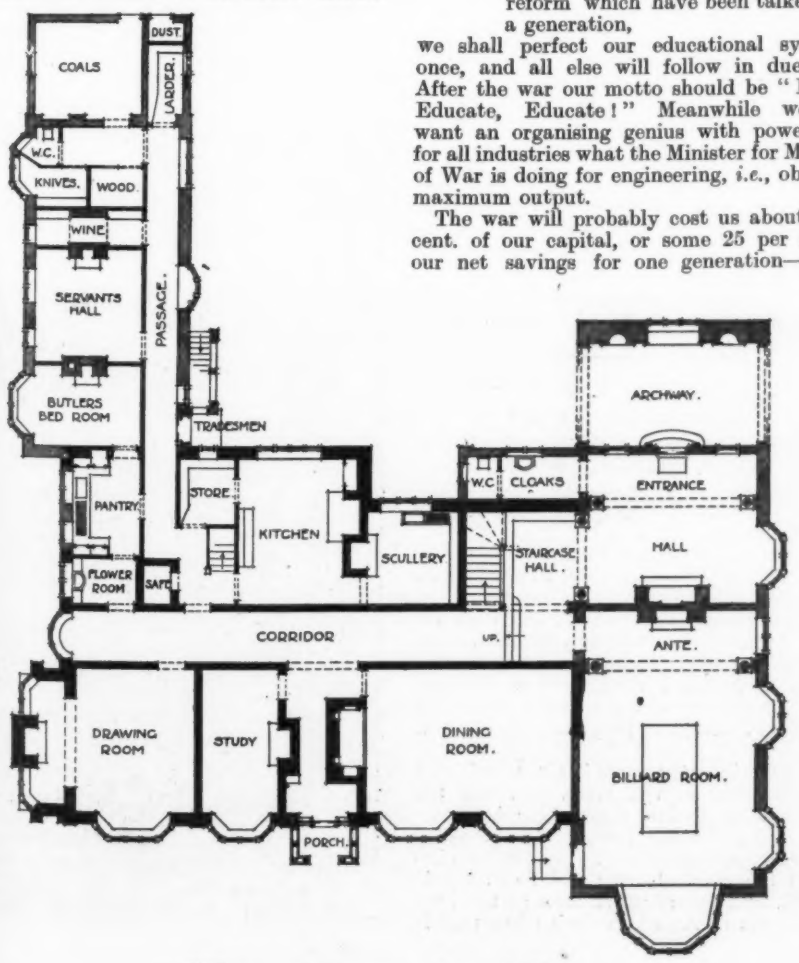
we shall perfect our educational system at once, and all else will follow in due course. After the war our motto should be "Educate, Educate, Educate!" Meanwhile we sadly want an organising genius with power to do for all industries what the Minister for Munitions of War is doing for engineering, *i.e.*, obtain the maximum output.

The war will probably cost us about 10 per cent. of our capital, or some 25 per cent. of our net savings for one generation—that is assuming no gains to this country under the terms of peace. This price would hardly be felt by us as a nation if it purchased free trade with our Allies; proper conditions of labour and housing, prevention of destitution, and a natural rate of infant mortality; sane organisation of industries, and continual encouragement to research workers.

What is needed is that the country should be instructed in the facts, and directed with combined wisdom and imagination. What saving is necessary should be enforced by taxation, with care that as far as is possible there shall be equality of sacrifice.

JOHN E. YERBURY.





"Normans," Rusper: Ground Plan.

Mr. Guilford W. Dudley, Architect. (*See page* 140.)

Domestic Hot Water Supply.

SIR,—My attention has been drawn by a firm of architects to correspondence in May and June numbers of the *Builder* relating to the question of supplying hot water supply systems "direct from the main."

A system originated by the writer some years ago, and now used in some four or five hundred cottages in various towns, has direct connection with the cold main supply, is connected to a hot storage cylinder, has a permanently open end for exhaust, and cannot be drawn empty.

The system was especially designed for cottages and small houses and to do away with the cold storage tank nuisance. It has proved quite successful, and its adoption is largely on the increase.

The cost, I may add, is from 25 to 30 per cent. less than the old "tank system," and frost troubles with it are quite unknown.

The only objection met with so far is that raised by one or two water companies, owing to a somewhat out-of-date regulation which insists that hot supply systems must have a cold storage tank, although it has been found that my system is most advantageous in practice.

I shall be glad to give any further particulars to those interested in the matter.

S. H. DONNELLY, A.M.I.Mech.E.

Council Offices,
Hitchin R.D.C.

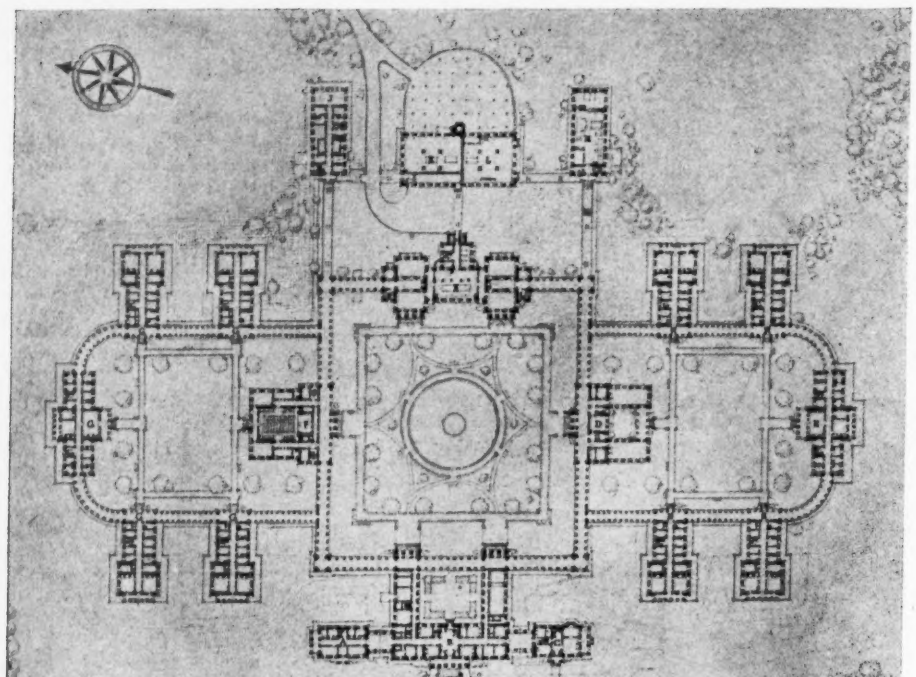
Hardwood Joiners in Vancouver.

SIR,—I should be obliged if you would make known to readers of your paper who are requiring first-class hardwood joiners that there are in this city of Vancouver at least 300 or 400 first-class English hardwood joiners who are absolutely workless, and that there is no prospect of any improvement.

There has been some of the finest hardwood joinery executed in this city that I ever saw, and I cannot but think that under present conditions these men would be valuable in the old country small arms factories or to some of the large shipbuilders. If, by means of your paper, you could put us in touch with firms requiring this class of men you would be conferring an inestimable boon upon us.

Possibly the Munitions Committee could help us out. C. MOULDER.

Ardley Post Office, B.C., Canada.



Winifred Masterson Burke Relief Foundation, White Plains, N.Y.

Messrs. McKim, Mead, & White, Architects.

(From the *Brickbuilder*, Boston.)

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ILLUSTRATIONS.

"Normans," Rusper, Sussex.

THIS fine old seventeenth-century manor house has been altered and added to bit by bit during the last thirty years, and only a small portion of the old exterior—namely, the south-east front—is now visible. The house, standing some 400 ft. above sea-level, is situated on a slope of a hill, faces due south, and is sheltered from the north and east winds by rising ground at the back. It is about ½ mile from the village of Rusper, and commands magnificent views over Sussex. The extensive alterations and additions recently completed from the designs and under the superintendence of the architect, Mr. Guilford W-Dudley, of London, include two new wing extensions of the main building, cottages for gardeners, an engine and battery-room, garage, and garden walls, terraces, etc. Externally, the walls of the new east wing are faced with local purple-grey stock bricks to the level of the first floor, above which half-timber construction is used, consisting of massive oak timbers pegged together, the spaces between the timbers being filled in with brickwork, whitewashed to match the existing work. The roof, typical of the country's ancient homes, is covered with old stone slates. Purple-grey stock brick facings have been used throughout the new south-west wing, which has a tiled roof.

On the north side of the house some comparatively modern stabling has been demolished to make room for the courtyard, and an old cartshed has been renovated and refloored to form a garage. By the judicious use of old materials obtained from demolished buildings on various parts of the estate the recent additions have been brought into harmony with the older work.

The principal staircase, panelling, columns, doors, etc., and all external woodwork, including the window-frames, are of oak, as is also the hall ceiling, shown in the illustration, which has been constructed with materials resulting from the demolition of an adjoining cottage.

Messrs. Longley & Co., of Crawley, were the general contractors. Mr. Gilbert Seale executed the carving work; Messrs. Weldon & Co., of Croydon, supplied the casement fittings and leaded lights; Messrs. Walter Mossop & Co., of London, carried out the electric-light installation and the bells; the heating apparatus, hot-water circulation, and water supply were executed by Messrs. Rosser & Russell, Ltd., of London. Messrs. McDowall, Steven, & Co., of London, supplied the stores and grates; Messrs. James Gibbons, of Wolverhampton, and Messrs. Yannedis, of London, locks and door furniture; Messrs. Evered & Co., of London, the electric light fixtures; the wood block floors were carried out by Messrs. Fenning & Co., of Hammersmith; and the paving and wall tiling to bathrooms and lavatories by Messrs. Rust's Vitreous Mosaic Company.

Winifred Masterson Burke Relief Foundation, White Plains, New York.

WE give illustrations of this admirable example of Messrs. McKim, Mead, & White's work, which shows the adaptability of architecture of the old Colonial type to purposes of modern design.

The Colonial Georgian work is a more refined and slighter variant of our own Georgian architecture, and is even more adaptable to purposes of modern design than the work on which it is founded. It is natural that, connected as it is with the early history of the American Republic, it should possess associations for Americans which render it a peculiarly fitting type of design to perpetuate in modern practice.

Together with the architecture of the Spanish Missions in the West, it forms the indigenous contribution of America to architectural style, which in the main is based on French prototypes modified by modern requirements of the greatest commercial country in the world, and the effect of both of the indigenous founts of American design has told in the direction of restraint, which has become so marked a feature of transatlantic design.

American design can only be fully appreciated by those who have seen it in its own environment of clear atmosphere and bright sunlight, which renders the utmost refinement of line and detail telling, when it would seem tame and inexpressive in a moisture-laden atmosphere with less sunlight, which we are accustomed to here.

Our Georgian architecture is as instinctively suitable to atmospheric conditions here as the old Colonial is to America, and for that reason the repetition of what is suitable in one country is undesirable in another, which still leaves us room to study with advantage to our own work the repose and spaciousness of the best architecture of the United States of America.

Organ Case, Towyn Church, Merioneth.

WE give an illustration of this fine organ case, executed from the design of Mr. Charles E. Bateman, of Birmingham, by Messrs. R. Bridgman & Sons, Lichfield.

"Aldine House," Bedford-Street, W.C.

THESE illustrations are given in connection with an article which appears on page 141. The architect is Mr. E. Keynes Purchase, F.R.I.B.A.

Memorial to Lord Vernon, Sudbury Church.

WE give an illustration of an alabaster tablet erected in Sudbury Church from the designs of Mr. Charles E. Bateman, of Bir mingham. The tablet was made by Messrs. R. Bridgman & Sons, Lichfield.

FIFTY YEARS AGO.

Chester.

THE Town Council, at their last quarterly meeting, after a long discussion, adopted the report of the Town Hall Committee, recommending the carrying out of Messrs. Lynn & Lanyon's design, "Love's Labour," and the acceptance of the lowest tender (Messrs. Clarke's) for carrying out the design. The Committee having recommended that the design be carried out without the tower, the drawings exhibited on the walls which included the tower were removed before the discussion commenced. The question of the new town hall has now been between two or three years before the Council.

[*** We give the above extract from the *Builder* of August 19, 1865.]

Model for Tablet to be executed in Alabaster.

Mr. C. E. Bateman, F.R.I.B.A., Architect.

CONSTRUCTION SECTION.

"ALDINE HOUSE," BEDFORD-STREET, W.C.

THESE premises were erected some time ago for Messrs. J. M. Dent & Sons, the publishers of "Everyman's Library" and "Wayfarers' Library," from designs prepared by Mr. E. Keynes Purchase, F.R.I.B.A., the site being a corner one with frontages to Bedford-street and Chandos-street, and the treatment adopted is well considered. The frontage to Bedford-street is about 80 ft., and the building extends back to Bedford-court, a depth of about 140 ft.; while there are two frontages to Chandos-street, the return at the corner being about 32 ft. and the other about 35 ft. The original scheme provides for dealing with the building between these two frontages, as it is intended to rebuild this when the lease expires, and there will then be a continuous frontage to Chandos-street of about 106 ft. The elevations of the building, which we give this week, are Queen Anne in style, with a simple brick and stone treatment for the upper part, the columned oak shop-fronts forming the ground floor. A great deal of the effect is obtained by the colour of the bricks, which exhibit taste in their selection, being varied and not too uniform in appearance, with suitable pointing. Portland stone was employed for the cornice and dressings generally, and the corner is marked by a small turret terminated by a copper roof.

The shop-fronts were not hampered as regards design by the necessity of providing large plain glass areas, as is the general rule, and the architect has taken full advantage of the opportunity offered to produce an architectural shop-front. The Doric Order has been employed for the columns, and these, together with the pilasters, fascia, cornice, and the remainder of the woodwork, have been executed in Austrian wainscot oak, rendered antique in appearance. The effect required was obtained by taking the material as it left the plane and applying hot stain of a dark colour; whilst the surface was worked with stiff wire brushes, which tore out the grain and gave that rough surface which is a feature of old oak. The wood was wax-polished after the required colour and effect were obtained.

The building has a total height of about 70 ft., there being one floor below the pavement and four above the ground floor, while the cubical contents are such that two internal party walls were required to divide the structure into portions in conformity with the London Building Acts.

The ground floor is devoted to showrooms and offices for the use of Messrs. Dent & Sons, and the upper floors are let off as offices. A passenger and goods lift are provided to serve the upper floors, and a hoist is installed to serve the basement from the back of the building in Bedford-court. A small book-lift is also provided between the basement and ground floors, and there are three staircases, which serve all the floors.

With the exception of the division, external and party walls, the whole of the construction is executed in reinforced concrete. It was originally intended to employ ordinary steelwork for the floors, beams, and stanchions, but upon investigation it was found that a considerable saving could be effected by the use of reinforced concrete, and this material was therefore selected. There are about thirty-one reinforced concrete columns, which go down to the soil, and the largest of these have reinforced concrete foundation slabs 8 ft. 3 in. square. The size of the columns and the foundations varies considerably, as the site is an irregular one, and the positions of the supporting members were naturally governed by the positions of the internal division walls and the external walls on the upper floors and the planning generally. The main piers in the façades are spaced at 20-ft. centres, and in the case of the portion adjoining Bedford-street an external wall occurs parallel to the main front on the upper floors at a depth of about 30 ft., and the main beams therefore run at right angles to the front elevation, and the secondary beams span the distance between the piers mentioned above as 20 ft. These are about the maximum spans, the building at the rear being divided up into slightly smaller bays. The upper floors were designed as ordinary warehouse or office floors, but the ground floor was calculated to carry a super imposed load of 3 cwt. per foot super., owing to its intended use as book showroom, library, and stores, and this necessitated larger beams and more steel than are usually provided in business premises. The main beams have a maximum size of 30 in. by 15 in., with secondary beams 18 in. by 9 in., and floor slabs 4½ in. thick; and the largest columns, which occur under this floor, are 27 in. square, with eight vertical rods as reinforcement. Generally speaking, there is nothing exceptional about the reinforced concrete construction, the ordinary method of lay-out and design being followed. The roof was also formed in this material, with slabs varying from 3 in. to 5 in. in thickness and 4½ in. dormer checks. Special consideration was given to the main beams, which were of cranked form to ensure the sloping portion being effectively tied at the angle with the horizontal portion and also with the main beams of the floor below to prevent any inclined thrust being exerted on the external walls. The turret roof was constructed as a reinforced concrete cone with concrete 4 in. thick and radiating and horizontal bars, and the concave shape required was formed with coke breeze, concrete filling placed on this.

The two staircases serving the rear portions of the building are constructed with concrete having steel tees in each step and rolled-steel joists in the landings, bolted to steel stringers; and the treads and landings are finished with 1½ in. of granolithic, and the risers with the same material, 1 in. thick.

The principal staircase next the Bedford-street entrance is designed in the Queen Anne style, and affords a good example of this type. It is constructed with teak carriages and bearers and Austrian wainscot treads, risers, handrail and balusters, with a wall dado of similar material.

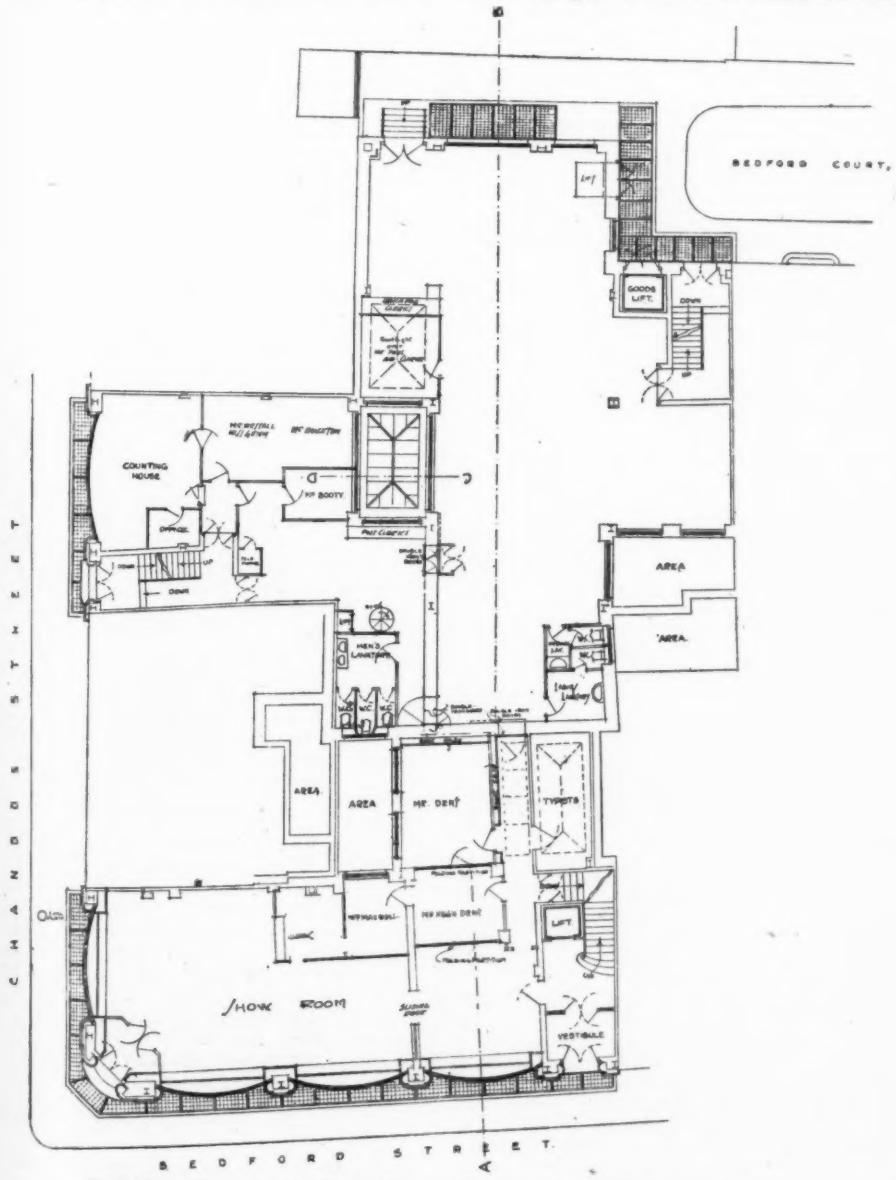
The floors generally are finished with 1 in. of granolithic, except in the showrooms, where wood-block flooring is laid, and in the vestibule and staircase hall next Bedford-street, where marble paving is used.

The showrooms on the ground floor are panelled with oak designed in the same style as the elevations and staircase, and they are fitted up with bookcases and fitments generally, which have been considered and executed in conformity with the whole scheme, which attempts to suggest an eighteenth-century feeling in design.

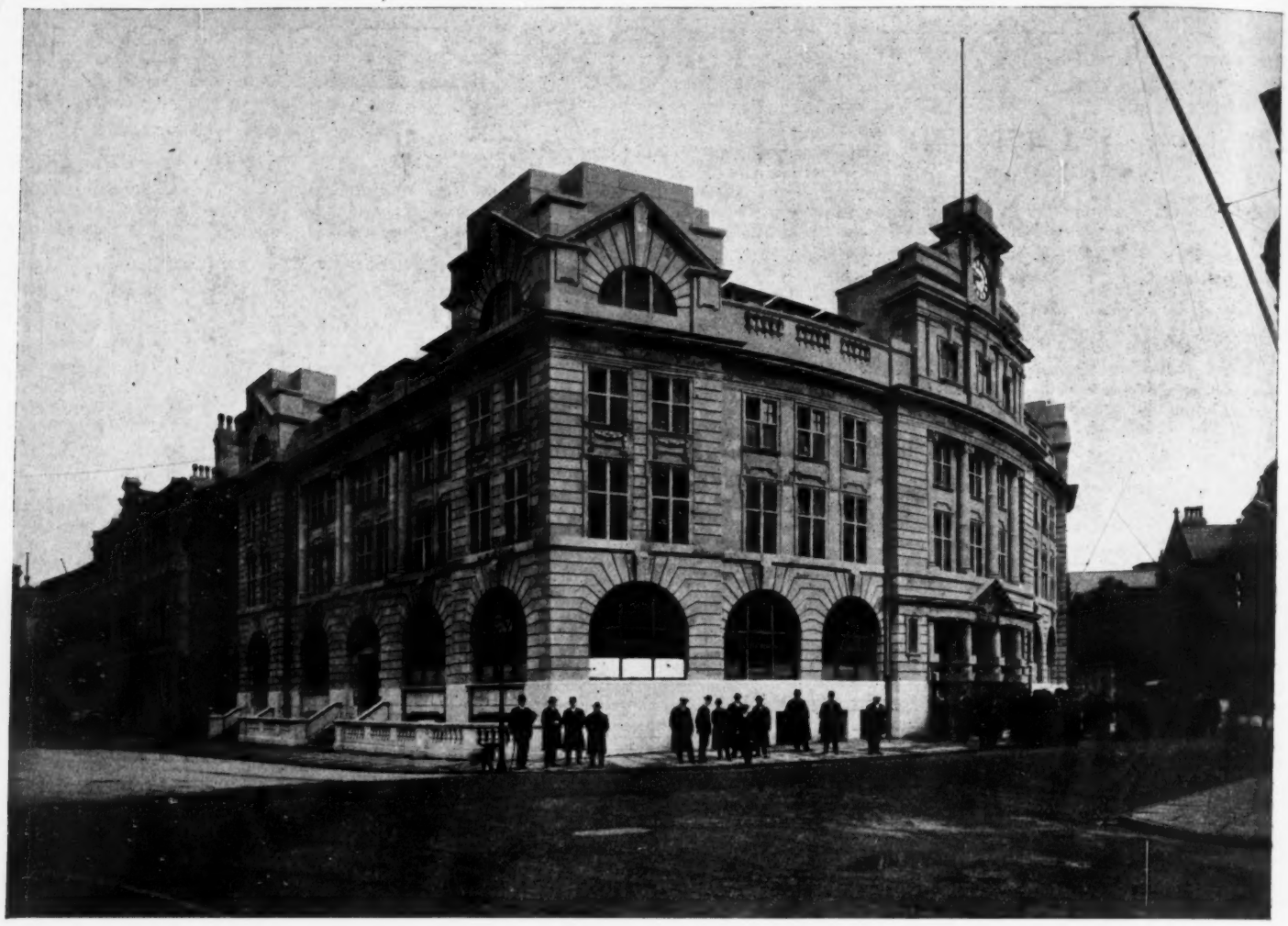
The building is heated throughout, and an independent water supply is provided by an artesian well, the water being pumped up to large storage tanks on the roof.

The general contractor for the work was Mr. C. F. Kearley, 4, Great Marlborough-street, W., and some of the subcontractors were as follows:—

Bricks—Messrs. H. C. Parker & Co.
Lifts—The Medway Safety Lift Company.
Artesian Well—Messrs. Isler & Co.
Fire Resisting Glazing, Skylights, and Pavement Lights—The British Luxfer Syndicate.
Sanitary Fittings—Messrs. Doulton & Co. and Messrs. J. Tylor & Sons.
Asphalt—Messrs. Engert & Rolfe.
Heating—Messrs. Comyn Ching & Co.
Marble Paving—Messrs. Chas. Walker & Co.
Electric Lighting—Messrs. Smeeton & Page.
Grates—Messrs. Bratt, Colbran, & Co.
Carving—Mr. Hearn.
Lift Enclosure—Messrs. Brawn & Co.
Grilles to Shop Front—Messrs. William Morris.



"Aldine House," Bedford-Street, W.C.: Ground Floor Plan.
Mr. E. Keynes Purchase, F.R.I.B.A., Architect.



New Exchange Buildings, Swansea. (*See page* 143.)

Mr. C. T. Ruthen, Architect.

Iron Doors—The Crittall Manufacturing Company.

Copper Work to Turret—Messrs. Mellowes & Co.

Safe Door—Milners.

Ironmongery and Furniture for Shop Front—Messrs. Yannedis.

ARCHITECTS AND MODERN CONSTRUCTION.

THERE are many architects who look upon modern construction as coming more within the scope of the civil engineer than within their own sphere, and in consequence they neglect to study seriously this important branch of architecture. All classes of construction should undoubtedly come within the architect's curriculum, because it is only by having a thorough knowledge of this subject that he can design efficiently and economically, and thus do his duty to his clients. Generally speaking, the subject is studied casually, and the simple forms only are mastered, such as will obtain in ordinary domestic buildings, but when the question of scientific construction in large buildings of a modern type or investigation of the properties of materials comes into view, then the architect is inclined to feel that he can proceed no farther unless he intends to specialise in this particular subject. It is a well-known fact that the scope of an architect's training is a very large one, and many years of very hard study and practical experience are necessary to equip him sufficiently for his duties; but it is also obvious that the study of construction is seldom treated with sufficient importance by the average architect. Upon reading the results of the Intermediate and Final Examinations held by the Royal Institute of British Architects it will invariably be found that the percentage of failures in constructional subjects is greater than that in any other, and this indicates either lack of interest or insufficient study, or probably both, the student in many cases hoping that he will be able to "scrape" through his examination and put certain letters after his name. He does not appreciate the fact that the proper study and interest of construction will be of great assistance to him in later years, and it is included in his Examination syllabus for this reason.

Generally speaking, it is architectural design which possesses the greatest fascination for architects, and they desire to see their taste and ideas embodied in the treatment of a building; but, having prepared a drawing on paper expressing their ideas, they are often quite content to leave the actual responsibility for the realisation in other hands. It is, however, impossible to dissociate design and construction in this manner, as all successful design must necessarily take into account the nature and limitations of the various materials to be used; and it will always be found that any work which does not satisfy the spectator as being constructionally sound is equally unsatisfactory as regards artistic design.

There are a certain number of persons who are born designers, and they have a special genius for producing designs which are of the highest merit, while it is impossible for them to carry them out without assistance as to construction; but, generally speaking, a good knowledge of construction can be acquired by anyone if sufficient time is devoted to theoretical and practical study. In design, the question of individual taste will always be an important factor, and what is pleasing to one designer will possibly be rejected by another; whereas in construction the student has to deal with actual facts of strength, lasting qualities, and economy, and the principles of good construction of all kinds should be thoroughly mastered before any attempt at designing is made. The architect should also keep up with the times and study modern methods of construction, as it is only in this way that new types can be applied to produce true architectural effect, no designer who is without knowledge and sympathy with the material being able to evolve the best work.

Architects must realise that the client is interested in the actual structure as executed, and, although the architectural effect produced will be an important factor, the sound construction and lasting qualities will be the primary consideration to him, and, from a business point of view, it is necessary that the client should be satisfied and pleased not only at the time of completion, but also after several years have passed. The architect is responsible for the adoption of the various materials used, and also for the manner in which the work is executed, and unless he possesses a good knowledge of building construction he cannot fulfil his functions in a proper manner. The architect is retained by the client, not only to prepare designs, but also to see that the work is carried out in a satisfactory way, and it behoves every architect to direct and supervise the building under his charge in such a manner that the client gets sound construction, and in many cases the necessary knowledge and training are lacking. In the case of large buildings, where the construction is of a complicated nature and a tremendous amount of work is involved in the calculations and preparation of the necessary drawings, it is quite natural and proper that a consulting engineer is employed to work in conjunction with the architect; but the latter should, at the same time, possess sufficient knowledge to be able to discuss the various problems intelligently, and he should retain his position as the chief agent of the client and be responsible for the actual structure. There is a great tendency, however, to shirk this responsibility, and even in small buildings it is a general thing for architects to give the calculations and preparation of the steel and other constructional drawings into the hands of firms whose interest it is to make a profit on the work.

How many architects are able to design the constructional steelwork for their own buildings? Very few indeed, and the consequence is that they are absolutely in the hands of the merchants who supply the material, and this despite the fact that the architect is the responsible person, and no guarantee given by the person supplying the material can release him from that responsibility. Steelwork construction should be studied by the architect, and he should be competent to design and check same, as it enters largely into modern construction, and it is his duty to give size and details of all parts of a structure for which he is paid to design and supervise. Failing the employment of a competent independent engineer to do the work for him, he is likely to get too much or too little steel in the building,

for which his client pays, in accordance with his methods of obtaining schemes from merchants without or with competition. What applies to steelwork applies also to other constructional materials, and it is absolutely essential for a competent architect to be thoroughly trained in building construction.

The modern developments are all on the lines of more scientific methods, and perhaps the most striking example of this is provided in the extensive use of reinforced concrete during recent years; and yet there are very few architects who have attempted to take up the proper study of this material in order that they may be able to check the specialist working under him, or design typical portions of a structure for his own guidance when preparing the general architectural drawings. This state of affairs is to be regetted, and it is this attitude of the architect to the many branches of his profession, apart from the purely artistic side, that has earned for him the reputation of being generally a poor man of business. The average client appears to be imbued with this idea also, and in many cases looks upon an architect's fees as excessive; whereas, if the work of designing, detailing, and supervising is properly carried out, an architect thoroughly earns the money. When this disastrous war is over there will be much work for architects on the Continent and elsewhere; but a knowledge of building construction and business ability generally will have a tremendous effect on the success or otherwise of those in this country who obtain a share in the work, and it is to be hoped that endeavours will be made by architects to prove their worth as business men, and this can only be done when the realisation comes that the actual construction of all classes of building work is a question which comes within their sphere, and must therefore be seriously taken up by them and not relegated to other persons.

EXCHANGE BUILDINGS, SWANSEA.

THERE has recently been erected in the vicinity of the docks at Swansea a fine and imposing structure, with bold frontages both in Adelaide-street and Cambrian-place. Costing close upon £30,000, Exchange Buildings, as the new premises are known, have been erected upon the site formerly occupied by the building which housed the local Chamber of Commerce, that at one time had served as the Old Burrows Chapel, one of the chapels associated with the Countess of Huntingdon's Connexion. A few generations ago the site had formed part of the foreshore of the Swansea Bay, made up mainly of sand, with a somewhat peculiar formation of clay pockets in places.

Owing to the somewhat unreliable nature of the ground and the heaviness of the proposed building, it was decided to place a reinforced-concrete raft over the entire area of the site, and the whole of the constructional portions of the premises have been carried out in reinforced concrete. The architects also found it necessary to adapt the lower ground floor for restaurant purposes; and the fact that the floor level was about 7½ in. below high spring-tide level, involving the possibility of flooding, necessitated the provision of tidal valve arrangements to prevent it.

Coming to the interior arrangements of the building, access to the lower ground floor is obtained by a flight of steps leading down from the entrance in the centre of the Adelaide-street façade. The large dining-room, which occupies the greater part of the centre of this floor, is capable of seating about 600 persons. In order to obtain the greatest possible amount of light, and to give as bright an effect here as possible, the walls have been panelled to the full height in white wood and silvered plate-glass has been extensively used. To complete the bright effect the reinforced-concrete columns have been encased in Italian marble, and the floor has been laid with Belgian white-and-black marble tiles, each measuring 21 in. square. Effect has been obtained by the system of lighting adopted in this part of the building, the installation being mainly semi-indirect, and the fittings take the form of large glass bowls, with a series of lamps suspended below upon long glass droppers. At the back of the restaurant a big service room is provided. To the left are placed the smoke lounge, commodious billiard-room, bar accommodation, and lavatories; whilst to the right are the kitchen and larder, cloakrooms, additional lavatories, heating chamber, and post-office room.

The portico in Cambrian-place leads to the main entrance, which gives direct access, through an ante-room, to the Exchange itself, provided for the use of members of the Swansea Chamber of Commerce. The central hall is panelled in oak to a height of 9 ft., has an oak floor, and is centre-lighted by means of a stained-glass dome. On the right, adjoining, is the committee-room, or council chamber, together with secretary's room, behind which is the post-office. The offices occupied by several large shipping firms, at the back of the Exchange, are reached by an entrance in Adelaide-street; whilst those in the front of the ground floor are entered through the portico, as is also the post-office. A porters' room adjoins the Exchange, and to the left of the restaurant entrance are situated a tobacconist's shop and haircutting saloon.

The upper part of the building, which consists of three floors, has been planned to contain about eighty offices. Access to these floors is provided by two main entrances, situated in each street, as well as by means of two automatic press-button passenger-lifts, to be found on either side of the committee-room, on the upper ground floor.

These premises have been erected for the Swansea Exchange Buildings, Ltd., from the designs and under the direction of Mr. Charles T. Ruthen, Licentiate R.I.B.A., M.S.A., of Bank Chambers, Heathfield-street, Swansea, in association with Mr. E. G. Allen. The general contractors were Messrs. Henry Billings & Sons, Swansea.

LONDON PORT EXTENSIONS.

As the demand for storage space at the docks of London is still unsatisfied, the Port of London Authority has decided to put in hand immediately the provision of considerable further accommodation. Additional sheds are to be provided at Millwall Dock, where 108,600 sq. ft. of fresh shedding were recently completed. At the Royal Victoria Dock it has been arranged to re-erect a shed with an area of 49,000 sq. ft. which formerly occupied the site of the new cold storage sorting shed at the Royal Albert Dock. These are only part of the enormous amount of work which the Port of London Authority is carrying out.

New Exchange Buildings, Swansea.
Mr. C. T. Buthen, Architect.

THE BUILDING TRADE.

"AMERICAN BUILDERS' WEEK" AT PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

THE most important coming event of the year to U.S.A. builders is "American Builders' Week" at the Panama-Pacific International Exposition in October next, from the 18th to the 23rd.

The importance of the builder, as an individual as well as collectively, his intimate connection with all industrial and national progress, is at once manifest when we recall the fact that 40 per cent. of the entire population of the United States is directly or indirectly dependent upon the building industry and its success. No one line of business has more to do with progress than the builders of homes, of cities and towns, and those public utilities upon which the comfort, health, and happiness of the people depend.

No such opportunity as American Builders' Week has occurred for a long time of promoting harmony, nor could a more appropriate place or season for such a gathering have been selected.

The assembling of many thousands of builders from every city and corner of the country to participate in such a builders' celebration cannot fail to promote and foster an interchange of progressive thought upon technical and business matters or to establish more firmly good-fellowship, educational and social intercourse.

Actively identified as builders naturally are in the upbuilding and development of cities and towns, the visitors to San Francisco this year will have not only the opportunity of viewing the Exposition buildings, but in the City by the Golden Gate they will find one of the most up-to-the-minute modern cities in the world.

From a mass of ashes, ruins, and complete desolation which covered over four square miles in April, 1906, a new city has arisen—a new San Francisco, the "Queen of the West"! And she stands to-day a monument to her local builders, the men who are now cordially inviting their brethren and all who build to come and view their finished work, to share their hospitality, and to contribute by their presence to the joy and success of American Builders' Week.

It is eminently fitting, therefore, that at this great International Exposition, which commemorates the bringing together, the uniting of two great oceans builders, that national builders in every line of activity should also be brought together and be permanently united in lasting bonds of friendship, sympathy, and mutual support upon a scale never before attempted.

We learn that a strong general committee embracing representatives from all branches of the building business in San Francisco, with numerous sub-committees, are actively engaged in making the necessary arrangements to ensure the success of this great celebration of builders. Invitations to attend are being sent to every Builders' Exchange and similar organisations in the U.S.A. and to the building Press.

It may be mentioned that the San Francisco builders are receiving the cordial co-operation of the Exposition authorities, who join in extending a special invitation to builders to attend the Exposition during American Builders' Week.

It may also be stated that the leaders in every trade connected with the San Francisco building industry, the local building material firms and supply houses are all heartily co-operating with the builders in this movement.

BUSINESS PREMISES, MILK-STREET, E.C.

Additional premises for Messrs. Rylands & Sons are in course of erection in Milk-street, Cheapside, E.C. The architects are Messrs. Chatfeild Clarke & Son, Bishopsgate, E.C. The general contractors are Messrs. Hall, Beddall, & Co., Waterloo Bridge, S.E., and the steelwork is by Messrs. Power's & Deane, Ransomes, Ltd., Cubitt Town, E.

PROPOSED NEW BUILDINGS AND OTHER WORKS.*

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works, at the time of publication, have been actually commenced. Abbreviations:—T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; L.G.B. for Local Government Board; B.G. for Board of Guardians; L.C.C. for London County Council; B.C. for Borough Council; and P.C. for Parish Council.

ALGERIA.—The *Journal Officiel* (Paris) publishes a Decree declaring of public utility the plans drawn up by the local Government for the improvement of the port of Mostagenem, in the Department of Oran, and providing for dredging work and the construction of quays, wharves, and a slip at a total estimated cost of 1,720,000 frs. (about £63,700). In return for providing 1,200,000 frs. (about £44,400) towards the works the local Chamber of Commerce has been granted a fifty years' lease of the land adjacent to the docks.

Amersham.—Plans passed by R.D.C.:—Alterations to Chilterns, Ley-corner, Ley-hill, Messrs. Kemp & How; house, King's-road, Chalfont, Mr. Axe; house, Two Dells-road, Ashley Green, Mr. Kew; and two houses, The Common, Chalfont St. Peter, Mr. Morley.

Andover.—Additions to premises of the London and Westminster Bank; bungalow in London-road, for Mr. R. Cox; two houses, Anton-road, for Mr. H. Gamman.

Ashby Woulds.—Plans passed by R.D.C.:—Pair of cottages, Ashby-road, for Mr. Spalding, and two for Messrs. W. & S. Meakin on the same road; addition to house of Mr. Robert Jones in Donisthorpe-lane; addition to the Bath Offices, Moira, for the Moira Colliery Company, and for new workshops at the Marquis Colliery.

Barnet.—Plans of extension to Newton-avenue Works, for Mr. R. W. Paul, have been approved by the U.D.C.

Barrow.—Lodging-house, Chapel-lane, Walney, for Messrs. Vickers, Ltd.; thirteen houses, Rcmney-road, for Mr. J. Neal; shop and house, for Walney Housing Company; shop and outbuildings, Dominion-street, for the Isle of Walney Estate Company; two houses, West-avenue, for Mr. J. J. Mullinder; twelve houses, Haircoat-lane, Messrs. J. H. Neal & Son, Ltd.; twenty-two houses, Dudley-street, for Messrs. Wilcocks & Co.; house, Crosslands-park, for Mr. H. Britton; bungalow, Park House-road, for Mr. E. German; cinema theatre, Natal-road, for Messrs. Vickers, Ltd.; two houses, Haircoat-lane, for Messrs. Pye Bros.

Bishop's Stortford.—The U.D.C. have approved plans for new laundry washhouse at the Isolation Hospital, and of a cottage in Elm Grove-road for Mr. Bush. Messrs. Benskin's Watford Brewery Company have plans before the Council for a new barley store and engine-house at the Dells Malting.

Blackburn.—Two houses in Preston Old-road, for Mr. H. Southwark; storerooms in Penny-street, for Messrs Coar Bros; motor garage, Belper-street, for the Daisyfield Co-operative Society, Ltd.

Cardiff.—A large scheme is in contemplation for the extension of the Bute Docks. The proposals have been under consideration for some time, and are now receiving special attention on the assumption that at the end of the war there will be a great demand for coal for commercial purposes. It is stated that Lord Bute is prepared to spend £250,000 in new siding accommodation and in new equipment that may be needed. It is proposed to provide for the storage at the docks of an additional 90,000 to 100,000 tons of coal. There will be required about thirty miles of new railway lines.

Chesham.—The U.D.C. are being urged by the Thames Conservancy to prepare details in connection with a further reconstruction of the sewers.

Coalville.—The U.D.C. have approved of plans for a factory in North-street, Whitwick, for Mr. F. F. Burton.

Colne.—Plans for alterations to his shop by Mr. E. W. Brown; for the erection of a motor-house by Messrs. C. & T. Harris & Co., Ltd., have been passed by the T.C.

Crewe.—Plans passed for villa in Sefton-avenue, for Mr. Rogers; alterations to the Earl of Crewe Hotel, for Messrs. Greenall, Whitley, & Co.

Darlington.—Plans approved by T.C.:—Messrs. Kitching & Lee, extension to garage, Bond-gate; Messrs. G. Dickinson & Son, house in Arkendale-street, and house in Durham-road; Skerneside Sawing and Turning Company, engine-house in Wier-street; and Messrs. J. Curtis & Son, alterations to Nos. 10 and 11, High-row.

Dinnington.—It is proposed to build a Roman Catholic church at Dinnington, but not to proceed with the erection of a presbytery.

Dorchester.—The T.C. have passed plans for additions to the offices of Messrs. Symonds & Sons, solicitors.

Dufftown.—Plans for a stable and shed for Mr. J. Wiseman, Balvenie-street, have been passed.

Dumbarton.—The Dumbarton Building Society intend going on with a building scheme. The new scheme will include eighteen terrace cottages similar to those already erected at Silvertown, and four blocks of tenements similar to Beechwood-terrace. These are to be erected on the Overtoun Estate, between Silvertown and Dumbarton East station.

Dundee.—Villas in Dalkeith-road, for Messrs. J. Foggie & Son; store in Fairmuir-road, for Messrs. R. Bax & Co.

Elland.—The L.G.B. have suggested to the U.D.C. that they should proceed without delay to prepare and submit for the Board's consideration a scheme for the provision of dwellings under Part 3 of the Act of 1890.

Evesham.—The L.G.B. have approved of the scheme of the T.C. for the erection of fifty-two working-class dwellings at Bengeworth, and suggest that formal application should be made for sanction for the necessary loan so that directly time is opportune there may be no delay in carrying out the work.

Girvan.—The T.C. have passed plans for the election of twenty-four houses at Bourtree Hall by the South Ayrshire Collieries, Ltd., Glasgow.

Glasgow.—Linings granted by the Dean of Guild Court:—Messrs. Alexander Stephen & Sons, Ltd., shipbuilders and engineers, Linthouse, steel-framed building for store; Messrs. George M'Lellan & Co., Ltd., indiarubber manufacturers, add to works in Shuna-street; the Corporation of Glasgow, boiler-house and laundry at Knightswood Hospital, Anniesland; Messrs. G. & J. Weir, Ltd., engineers, Cathcart, to erect and alter buildings; Messrs. William Beardmore & Co., Ltd., a hammer forge in Duke-street, a pay office in East Wellington-street, and a drawing office and extension of motor garage in Old Edinburgh-road, Parkhead; Messrs. Barr & Stroud, Ltd., to alter and add to buildings at Caxton-street, Anniesland; the School Board of Glasgow, to erect a drill hall at the corner of Govan-street and Rose-street, S.S.; Mr. Frederick L. Morrison, writer, 211, Hope-street, to re-erect portions of premises destroyed by fire at 36-62, Renfrew-street and 236-252, Hope-street.

Gosport.—A L.G.B. inquiry has been held into the application of the U.D.C. for sanction to borrow £3,809 for sewerage purposes.

Halsted.—The U.D.C. have approved plans for the extension of the Isolation Hospital.

Hampshire.—The C.C. have passed estimates for extensive work of roads reconstructed by the exigencies of military traffic, the total amounting to £27,213 above the cost of ordinary maintenance.

Hastings.—Plans passed for offices for the Prudential Insurance Company, 7, Wellington-place; conversion of houses into flats at Duke-road, per Messrs. Adams & Jarrett, Ltd.; workshop and store at 207, Battle-road, per Messrs. A. W. Jeffrey & Son, architects.

Hemsworth.—Plans passed by R.D.C.:—House and stable at Hemsworth, for Mr. Hy. Smethurst; motor garage at Grimethorpe, for the Carlton Main Colliery Company; houses at Moorthorpe, South Kirkby, for Mr. Richard Thomas; scullery to house at Hemsworth, for Mr. John Hulme; additions to Roman Catholic School, Hemsworth, for Rev. C. Leteux; proposed mission church at Moorthorpe. Plans for twenty-two houses at Moorthorpe, for Messrs. F. T. Salmon & Co., are before the Council. The R.D.C. have also decided that the L.G.B. be asked to sanction forthwith the borrowing of the necessary money for the purchase of land and erection of working-class dwellings at Grimethorpe.

Hetton.—Plans approved by the D.C.:—House and shop at High Downs, for Mr. Downie, and a garage for Messrs. Lamb & Sons. Plans for the laying out of a street in Houghton-road for the erection of twelve houses for Mr. J. J. Storey are before the U.D.C.

Hove.—At a meeting of the T.C. the chairman of the Improvements Committee reported greater building activity in the town.

Kirkley-in-Ashfield.—Plans passed by U.D.C. for six houses in Clumber-street, for Messrs. A. Smith, T. Dove, and J. Tate; twelve houses off Annesley-road, for the Annesley Woodhouse Co-operative Society.

Littlehampton.—The U.D.C. have approved the plan and estimate for heating the new hospital buildings by radiation, and have resolved to ask the L.G.B. to sanction the work being carried out.

Looe.—Plans have been approved by the U.D.C. deposited by the Great Western Railway Company for an improvement of the approach to the station.

Midsomer Norton.—The U.D.C. have passed plans for two houses in Lynton-road, for Mr. H. Tovey.

Nelson.—House, warehouse, and stable in Charles-street, for the United Yeast Company.

Oakbank.—The directors of the Oakbank Industrial School are considering the erection of a new dwelling-house for the superintendent at a cost of £1,000.

Plymouth.—The T.C. have decided to proceed with the construction of a pipe line for water supply from Burrator at a cost of £60,000.

Porth.—Sir William J. Thomas has offered to build a new ward at the cottage hospital.

Rochdale.—Cottage in Woodland-road, for Messrs. G. Turner & Co.; shop, Royal Barn-road.

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* See also our list of Competitions, Contracts, etc., on page 148.

for Messrs. Tweedale & Smalley, Ltd.; alterations to Bridge Inn, Oldham-road, for the Phœnix Brewery Company.

Romsey.—Plans passed by R.D.C. for cottages at Mile Hill, for Messrs. Drewitt & Gale.

Runcorn.—Two houses, Morghland-lane, and two houses facing the Heath, for Mr. H. Prescott.

St. Helens.—Hose at Haresfinch, for Messrs. Walton & Wood.

Shipley.—Fourteen houses in Scarborough-road, for Mr. J. Bickerdike; bungalow, Redburn-drive, for Messrs. Proctor & Chippendale; house, Theckley Old-road, for Mr. R. Hughes.

Slaithwaite.—Plans passed by U.D.C.:—Three houses at Brook-terrace, Crimble, for Mr. Hervey Haigh; water tower at Bridge-street Mills, for Messrs. Pogson & Co.; additions to house at Blakestones, for Mr. George Gledhill; stable at Platt Mills, for Messrs. Beaumont Bates & Son.

South Crosland.—A plan for a bungalow at Martin Nest, for Mr. Frank Mellor, has been approved by the U.D.C.

Southam.—Plans for cottage at Fenny Compton, for Mr. B. Southall, passed by R.D.C.

Sunderland.—The T.C. have decided to proceed with the erection of a tuberculosis pavilion, contact block, and extensions to the administrative block at the Borough Sanatorium.

Swadlincote.—The U.D.C. has approved the plan of Messrs. Salt & Co. for alterations to the Coal Miners' Arms, North-street.

Torquay.—Seven houses on Redenhill-road, for Mr. G. Tozer.

Warrington.—The plans of the smallpox hcepital, which had been adopted by the T.C., have received the approval of the L.G.B.

GENERAL BUILDING NEWS.

BUSINESS PREMISES, NEW BOND-STREET, W.

Shops and business premises are in course of erection at No. 70, New Bond-street, W. The architects are Messrs. Palgrave & Co., Bloomsbury-square, W.C. The general contractors are Messrs. A. J. Staines & Co., Ltd., Great Tichfield-street, W.; the steelwork is by the Aston Construction Company, Eagle Wharf-road, Hoxton, N.; the floors are by the Fram Company, Victoria-street, S.W.: and the marble-work is by Messrs. Anselm, Odling, & Sons, Ltd., New North-road, N.

INSURANCE OFFICES, FINCH-LANE, E.C.

Premises for the British Dominions General Insurance Company, Ltd., are in course of erection in Finch-lane and Royal Exchange-avenue, E.C., the site having been cleared by Messrs. Hinton Bros., Barking-road, East Ham. The architect for the new building is Mr. A. H. Moore, A.R.I.B.A., Dowgate-hill, Cannon-street, E.C.; and the general contractors are Messrs. Patman & Fotheringham, Ltd., Theobald's-road, W.C.

BUSINESS PREMISES, GRACECHURCH-STREET, E.C.

An important block of offices and business premises is about to be erected at the King William-street end of Gracechurch-street, a semicircular frontage of 168 ft. being available. The site has been cleared by Messrs. Hinton Brothers, Barking-road, East Ham. The architect for the new structure is Mr. F. R. G. Wills, A.R.I.B.A., Chancery-lane Station-chambers, High Holborn, W.C.; and the general contractors are Messrs. Howell J. Williams, Ltd., Bermondsey-street, London Bridge, S.E.

TRADE NEWS.

The "Boyle" system of ventilation (natural), embracing Boyle's latest patent "air-pump" ventilator and air inlets, has been applied to the Seaforth Palladium Picture Palace, Seaforth, near Liverpool.

In reference to Haggerston Castle, which was fully illustrated in our issue of July 23, we have been asked to state that two full automatic push-button lifts (one for passenger and the other for goods service) have been installed there by Messrs. Smith, Major, & Stevens, Ltd., Abbey Works, Northampton.

The Seyssel and Metallic Lava Asphalte Company, 42, Poultry, E.C., informs us that rumour is being spread about with regard to its old-established business, suggesting that it is in abeyance. The company asks us to state that this is an utterly unfounded suggestion which is quite contrary to fact.

The Denaby Main Schools are being supplied with Shorland's patent exhaust roof ventilators by Messrs. E. H. Shorland & Brother, Ltd., of Failsworth, Manchester.

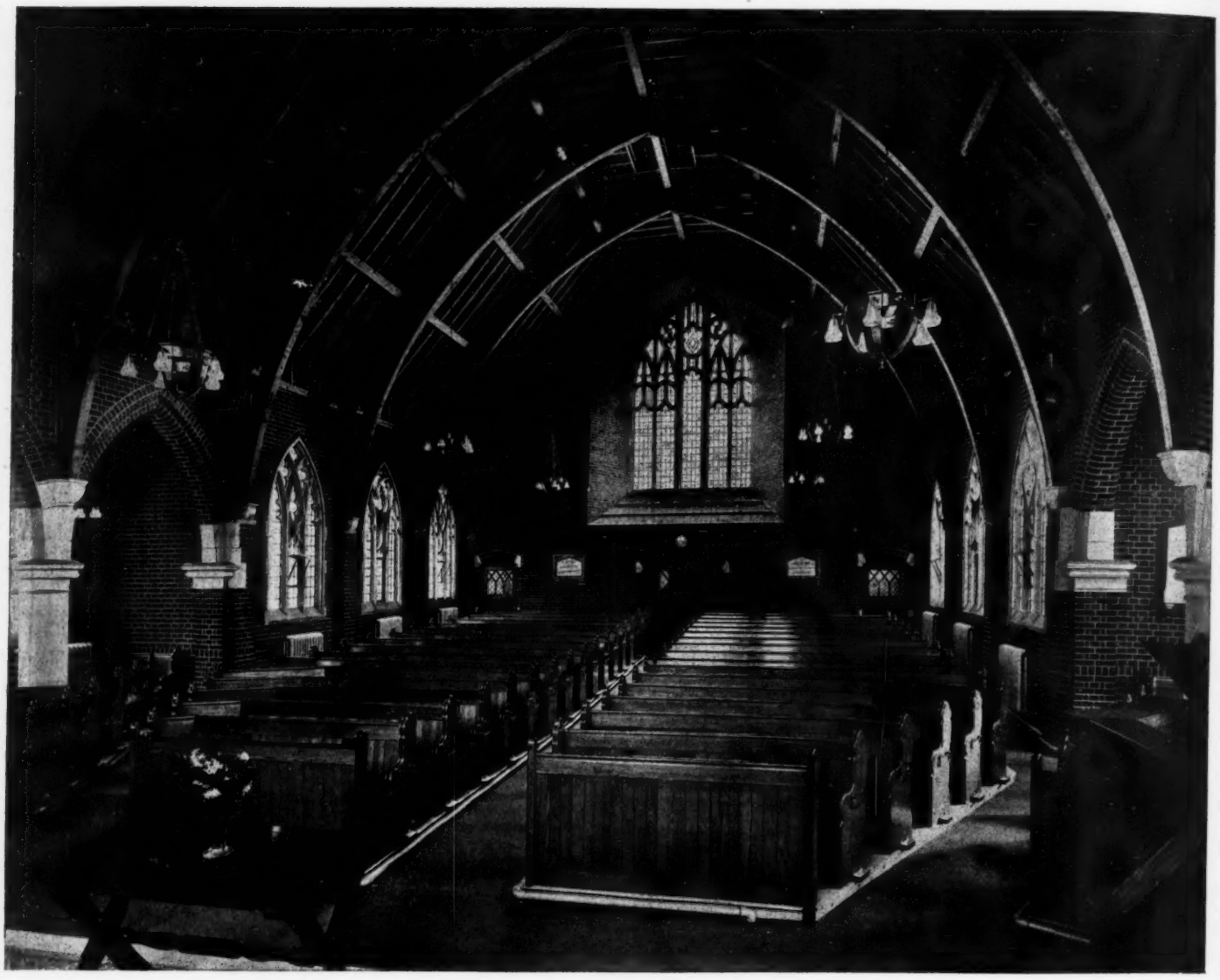
Messrs. C. Jennings & Co., timber and plywood importers, general woodworkers, 927, Pennywell-road, Bristol, inform us that they have boats just arrived with spruce, birch, red and white timber. In our advertisement pages this week particulars will be found of some portions of their varied and assorted stock. The firm, we are informed, will be pleased to answer inquiries in regard to timber, plywood, or woodwork of any kind, either manufactured or otherwise.

RATES OF WAGES IN THE BUILDING TRADE.

THE following are the present rates of wages in the Building Trade in the principal towns of England and Wages. It must be understood that, while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur:—

——	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Masons' Labourers.	Bricklayers' Labourers.	Plasterers' Labourers.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Aberdare	9	—	9½	9½	—	9	8	6½	6½	6½
Accrington	10	10	9½	9½	9	9	9½	6½	6½	6½
Altrincham	9½	10	10½	10	8½	10	9	6½	6½	7
Ashton-under-Lyne	10½	10½	10	10½	9	10	9	6	6	7
Barnsley	9½	9½	9½	9½	9	9	8½	7	7	7
Barrow-in-Furness..	9½	10	9½	9½	9½	9½	9½	7	7	7
Barry	9½	9½	9½	10	—	9	8½	6½	6½	6½
Bath	8½	8½	8½	8	7½	8	7½	6	6	6
Bedford	8	8	8	8½	8	9	6½	5½	5½	6
Birkenhead	11	11	11	11½	11	11	9½	7	7	7
Birmingham	11	11	11	11	10½	11½	9½	8	8	8
Bishop Auckland..	9	9	9	9	10	9	7½	6	6	6½
Blackburn	10	10½	10	10	9½	10	9½	6½	7½	7½
Blackpool	10½	9½	9½	9½	8½	9	8½	6	6	6
Bolton	10	10½	10	10½	10	10	9½	6–7	7	7
Bournemouth	8½	9	9	9	8½	9	8½	6½	6½	6½
Bradford	10	10	9½	9½	9½	10	8½	7	7	7
Bridgwater	6½	6½	6½	6½	6½	6½	6	4	4	4
Brighton	9	8½	8½	8½	—	8	7	6	6	6
Bristol	10½	10½	10½	10½	—	10½	9½	7½	7½	7½
Burnley	10	10½	9½	9½	8	9	9½	7	7	7½
Burton-on-Trent ..	9	9	9	9½	9	9	8½	6½	6½	6½
Bury	10½	10½	10	9	9½	10	9	6	7	7
Cambridge	9½	9	9	9½	9½	9½	7½	6	6	6
Canterbury	8½	8	8	10	—	8½–9	7	5	5	5
Cardiff	10	10	10	10	10	10	9	7	7	7
Chatham	8	9	9	9	9	9	7½	6	6	6
Chelmsford	8	7½	8½	9	—	7½	6½	5	5	6½
Cheltenham	8½	8½	8½	8½	—	8½	8½	6	6	6
Chester	9½	10	9½	9½	9½	9½	8½	5½	6½	5½
Chesterfield	9	9	9	8	9	8½	8½	5½	5½	5½
Colchester	8	8½	8½	9	8	9	6	5½	5½	5½
Coventry	10½	10½	10½	10½	9½	10½	9½	7½	7½	7½
Crewe	7½	8	7½	9	8½	8	7½	5½	5½	6
Darlington	9½	9½	9½	10	10	9	8½	6½	6½	6½
Derby	9½	9½	9	9	9	9	8	6½	6½	7
Doncaster	9½	9½	9	9	9	9	8	6½	6½	7
Dudley	8½	8½	9	8½	8½	8	7½	5½	5½	6
Durham	9	9	9½	9	10	9	8½	6	6	6½
East Glamorgan and Monmouthshire Valleys	9½	9½	9½	9½	—	—	8½	6½	6½	6½
Exeter	8	8½	8	8½	7½	7½	7	5½	5½	5½
Folkestone	8½	8½	8½	9	8½	8½	7–7½	6½	6½	6½
Gloucester	8	8½	8½	8	8	8½	8	5½	5½	5½
Grantham	8	8	7½	7½–8	7½–8	7	6½	5	5	5
Grays	—	10	10	—	—	9½	8½	7	7	7
Grimsby	9	9	9	9½	9	8	8½	7	7	7
Great Yarmouth ..	8	8	8	—	8	8	6½	5	5	—
Halifax	10	10	9	8½	8½	9	8½	7	7	7
Harrogate	9½	9½	9	9	8	9	8½	6½	6½	6½
Hartlepools	9	10	9½	10	10	10	9	7	7	7½
Hastings	8½	8	8	8½	8	8	7	6½	5½	6½
Hereford	8	8	7½	8½	8	7	7	5½	5½	5½
Huddersfield	10	9½	9½	9½	10	9	8½	7	7	7
Hull	10½	10	10	10	10	10	8½	7½	7½	7½
Ipswich	8½	8½	8½	9	9	8½	7	5½	5½	5½
Lancaster	10	10	9	9	9	9	9	6	6	6½
Leamington Spa ..	9	9	9	8½	9	9	8	6	6	6
Leeds	10	10	10	10	10	10	8½	7½	7½	7½
Leicester	9½	9½	10	10½	10	9½	9	7	7	7½
Lincoln	9	8½	8½	9	8½	8½	8	6	5½	6½
Liverpool	11	11	11	11	10½	11	9½	7	7	7
Llanelly	9½	9½	9½	8½	9	8½	8	5½	5½	5½
London	11½	11½	11½	11½	—	1s.	9	8	8	8
Loughborough ..	9	8½	8½	9	9	8½	7½	5½	5½	6½
Luton	9½	8½	8½	8½	9	8½	7½	6	6	6
Maidstone	9	9	9	9	9	9	8	6	6	6
Manchester	10	10½	10½	11	10	10	9½	6½	6½	7½
Mansfield	8½	9	8½	8½	—	8½	8	6	6	—
Merthyr Tydfil ..	9½	9½	9½	9½	8½	9	8	6½	6½	6½
Middlesbrough ..	9	10	9½	10	10	10	8½	7	7	7½
Newcastle-on-Tyne.	10½	10½	10½	10½	10	10	9½	7½	7½	7½
Newport, Mon.	10	10	10	10	8½	10	9	7	7	7
Northampton	9	9	9	9	8½	9	8	6	6	6
Norwich	8½	8½	8½	8½	8	8½	7½	6	6	6
Nottingham	10	10	10	10½	9½	10	9	7½	7½	8
Oldham	10½	10½	10½	10	9	10	9½	7	7	7½
Oxford	9½	9	9	9	8	9	8	6½	6½	6½
Plymouth	9	9	9	9	9	9	8	6½	6½	6½
Pontypridd	9½	9	9	9½	9	9	8	6½	6½	6½
Portsmouth	9½	9½	9½	9½	—	8½	7½	7	7	7
Preston	10½	10½	10	9½	9½	10	9½	6	6½	6½
Reading	8½	9	9	9½	—	9	7½	6	6	6
Rochdale	10½	10½	10	10	8½	9½	9	7	7	7½
Rochester	8	9	9	9	9	8½	7½	6	6	6
Rugby	9½	9½	9½	9½	8	9½	8½	6	6	6
St. Albans	9	9	9	9–10	9	9–10	8	6½	6	6½
St. Helens	9	9½	10	9½	9½	9½	9½	6	6½	6
Scarborough	9	9½	9	8½	8	9	8	7	7	7
Sheffield	10½	9½	9½	9½	9½	9½	8½	6½	6½	6½
Shrewsbury	8½	8½	8½	9½	—	8½	7	5½	5½	5½
Southampton	8½	9½	9½	8½	—	9½	8½	6½	6½	6½
Southend-on-Sea ..	9	9	9	9	P'cework	9	7	6	6	7
Southport	10	10	9½	9½	9½	9½	9½	6½	7	7
South Shields	10½	10½	10½	10½	10	8½	9½	7½	7½	7½
Stockport	10½	10	10	10½	9½	10	9½	6	6½–7	7½
Stockton-on-Tees .	9	10	9½	10	10	10	9	7	7	7½
Stoke-on-Trent ..	9	9½	9	9	—	8½	8½	6	6	—
Stroud	7½	7½	7½	7½	7½	7½	7	5	5	5
Sunderland	10	10½	10	10	10	9	9½	6½	6½	7
Swansea	9½	9½	9½	9½	8½	9	9	6½	6½	6½
Taunton	7	7	7	7	—	6	6½	4½	4½	4½
Torquay	8	8	8	8	8	8	8	6	6	6
Wakefield	9½	9½	9	9½	8½	9	8	7	7	7
Walsall	9½	9	9	9	8½	9	8	6½	6½	6½
Warrington	8½	9½	9½	10	8½	9½	8½	5½–6	6	6–6½
West Bromwich ..	10	10	10	10½	—	9	8	7	7	7
Wigan	10	10½	9½	9½	9	9½	9½	7	7	7
Windsor	9	9	9	10	—	9	—	6	6	6
Wolverhampton ..	9½	9½	9½	10	8	10	8	6½	6½	6½
Worcester	8½	9	9	9	9	9	7½	6	6	6
York	9½	9½	9	9½	9½	9	8½	7	7	7

The mason's rate given is for bankers; fixers usually ½d. per hour extra.



Baptist Memorial Church, Twickenham.

Messrs. Ingall, Bridgwater, & Porter, Architects.

BAPTIST MEMORIAL CHURCH, TWICKENHAM.

THIS church, which occupies an almost central site on one of the three sides of the triangle enclosing Twickenham Green, is the gift of Mr. and Mrs. Robert J. Braithwaite to the Baptist denomination. The seating provides accommodation for 370 adults, including the choir, for which latter no special arrangements were required.

The aisles have a slope of 1 ft. towards the rostrum and baptistery, so as to provide the congregation with an uninterrupted view of both, while towards the front the seating at the sides is placed at an angle, with converging aisles to fulfil a similar purpose. A carved oak pulpit occupies a position on the left side of the rostrum, from which it is approached.

The exterior of the building is faced with vari-coloured sand-faced "Old English" bricks, and the interior is lined with red-brown sand-faced bricks throughout. The stone used for the traceried windows and dressing inside and out is Monk's Part Bath stone. The baptistery and rostrum steps are in figured marble.

The roof is covered with sand-faced tiles of mixed colours, while something of an innovation is introduced in the way of internal lining to the roof covering. On top of the stained rafters and exposed between them are light grey asbestos cement sheets. The result is not only pleasing to the eye, but also heat and cold resisting, and, requiring no decoration, possesses the additional advantages of being fireproof, besides claiming, from an acoustical point of view, a superiority over the usual exposed boarded lining. The contract price for the erection of the building was £3,650.

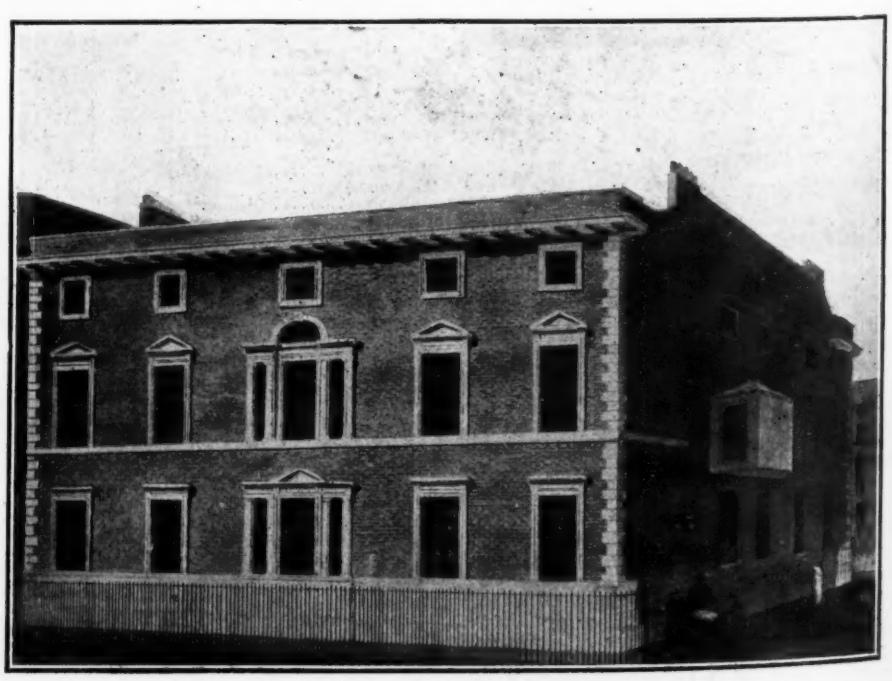
The external facing bricks were supplied by Messrs. S. & E. Collier, Ltd., of Reading; the roofing tiles by Messrs. G. Tucker & Son, Ltd., of Loughborough; the marble and terrazzo work by Messrs. J. Whitehead & Sons, Ltd., of London; the leaded lights by Messrs. William Pearce, Ltd., of Birmingham; and Messrs. The Midland Heating and Ventilation Company, Ltd., carried out the heating scheme.

Messrs. G. Godson & Sons, of Kilburn-lane, London, were the general contractors, and the architects were Messrs. Ingall, Bridgwater (M.S.A.), & Porter (Licentiate R.I.B.A.), of Birmingham.

CARRINGTON HOUSE, WHITEHALL.

WE select this week two drawings from Sir John Soane's collection, showing the house formerly at the corner of Whitehall-yard, which Sir Robert Taylor built for Lord Carrington.

The front to Scotland Yard is typical o



Carrington House, Whitehall: Front to Whitehall.

Sir Robert Taylor, Architect.

Taylor's restraint as well as a good example of the simplicity affected in the front of houses in the late eighteenth century. The Palladian *motif* entrance is balanced by a similar feature to the dining-room, the first floor windows are finished with straight sided pediments, and the frieze windows complete the *ensemble*. The front to Whitehall is an extended one, with a range of five windows, the centre bay being formed of a three light Palladian group. The drawings prepared to illustrate Sir John Soane's lectures at the Royal Academy are very faithfully rendered, and have caught the spirit of the time in an appropriate way.

PATENTS.

APPLICATIONS PUBLISHED.*

27,823 of 1913.—Leopold Kreidl: Air, dust, and like extracting system, comprising a number of suction conduits.

28,417 of 1913.—Albert Rinne: Manufacture of artificial stone slabs and the like.

29,356 of 1913.—August Wolfsholz: Construction of concrete piles.

29,415 of 1913.—Max Berndt: Device for automatically closing open windows upon sudden rain.

29,749 of 1913.—Anders Jordahl: Means for securing and supporting brackets, plumber-blocks, or other fittings on ceilings, beams, walls, or the like, constructed of reinforced concrete.

29,992 of 1913.—Fenestra Fabrik für Eisenhochbau Gesellschaft, m.b.H.: Metal windows.

1,040 of 1914.—Gustav Asbeck: Rolling of girders, beams, and so forth.

1,865 of 1914.—John Edmund Pick: Concrete buildings.

4,567 of 1914.—Franz Beckmann: Process for the manufacture of a neutral paint-binding medium, termed "painters' size," in the form of powder for house and decorative painting.

4,804 of 1914.—William Thomas Wallace: Portable frame for signs, partitions, and the like.

9,235 of 1914.—Ludwig Schomburg: Pipe sockets or expansion joints.

9,727 of 1914.—Utzschneider and Ed. Jaunez (firm of): Roughened paving and like blocks.

9,806 of 1914.—Emile Lamouille: Apparatus for cleaning window-panes and the like.

10,292 of 1914.—Bruno Lincke: Wall hook.

11,001 of 1914.—Paul Zürn: Process of obtaining a metallic lining for tanks, vats, or containers made of cement and concrete.

11,848 of 1914.—Moses Guise: Flues, flue liners, and the like.

13,610 of 1914.—Brown, Lennox, & Co. (London), Ltd., and Ernest Charles Ansell: Grabs.

14,283 of 1914.—Charles Edward Van Norman: Grinding machines.

16,764 of 1914.—Alexander McNamara: Rotary drilling or boring apparatus for boring in the earth's strata.

17,564 of 1914.—Benjamin Franklin Richardson: Construction of roadways and pavements, and material to be used therein.

17,712 of 1914.—Robert William Ford: Apparatus for heating water, air, or the like, for circulation heating systems.

17,787 of 1914.—Henry Albin Recen: Cutter heads for tunnelling machines.

18,318 of 1914.—Charles Sherwood Edwards: Chimney-tops.

19,546 of 1914.—Herbert Edward Mitchell and Walter William Nobbs: Method of ventilating and apparatus therefor.

20,005 of 1914.—Walter John Burridge: Floor cramp.

20,039 of 1914.—Sidney Herbert Alabaster: Nail extractor.

20,753 of 1914.—William Oates and Frank Petro Barber: Dry closets.

21,352 of 1914.—James Bennett: Steel construction for strong rooms and the like.

22,277 of 1914.—John Holt: Disinfecting apparatus for use in flushing cisterns.

22,677 of 1914.—Arthur Shaw & Co. and Walter Osborne Wallis: Hinge or pivot movements of swing mirrors and other pivoted articles.

23,509 of 1914.—Thomas Garforth Rhodes and Raymond Gaunt: Construction of siphons used in connection with flushing apparatus and the like.

23,708 of 1914.—Wilbert Daniel Henderson: Partition construction.

24,308 of 1914.—Samuel Rowland Parkes: Latches.

24,309 of 1914.—William John Mellersh-Jackson (West Disinfecting Company, U.S.): Sanitary closets.

140 of 1915.—Spencer Graves: Coating for wood, metal, or other surfaces.

877 of 1915.—James Peter Wright: Coating and preservative composition enamel for use with all metallic work.

1,190 of 1915.—De Vogel, Van Calcar, & Co.: Process for the manufacture of floor coverings.

1,379 of 1915.—George Gordon Brodie, Francis William Radford, and Alfred Edwin Wells: Boilers of kitchen or cooking-ranges and the like.

2,177 of 1915.—Samuel Cleland Davidson: Ventilation.

3,363 of 1915.—Louis Patrick Smith and James Hessy Heaverside: Pavements.

3,616 of 1915.—Samuel Rowland Parkes: Latches for doors or the like.

3,769 of 1915.—Mannesmannröhren-Werke: Pipe-socket joints.

4,308 of 1915.—Alfred George Kew: Hand-chipping tool for bricklayers' and masons' use.

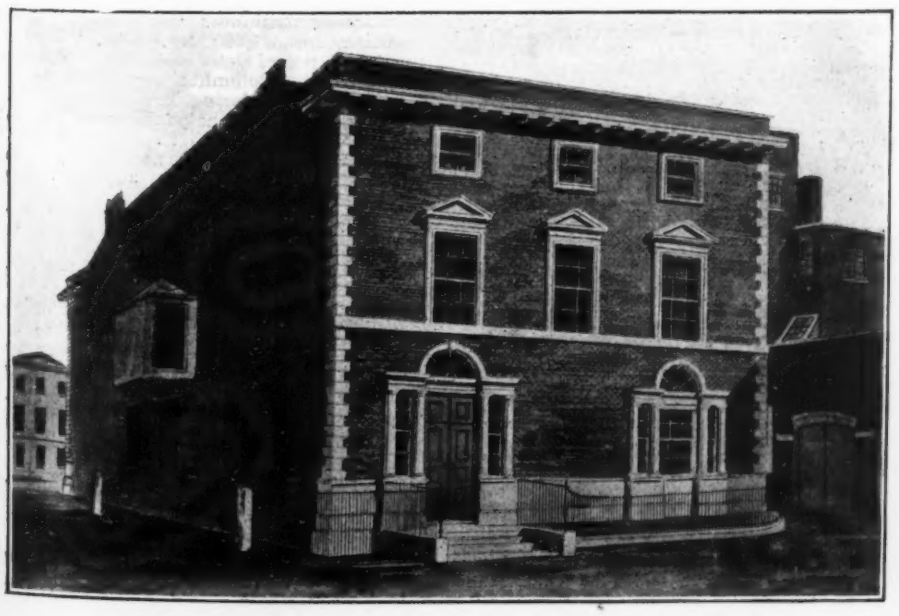
4,346 of 1915.—Sam Gregg: Covers for manholes or the like.

6,041 of 1915.—Frank Butcher: Method of fixing new firebars to existing kitchen-range fronts.

*All these applications are in the stage in which opposition to the grant of Patents upon them can be made.

Baptist Memorial Church, Twickenham.

Messrs. Ingall, Bridgwater, & Porter, Architects. (*See page* 146.)



Carrington House, Whitehall: Front towards Scotland-Yard.

Sir Robert Taylor, Architect. (*See page* 146.)

CATHOLIC CHURCH, CO. CAVAN.

A new Catholic church has been built, and will shortly be dedicated, at Mandabawn, near Cootehill, co. Cavan. The building was designed and built under the supervision of Mr. J. J. M'Donnell, architect, Belfast, at a cost of £3,000.

List of Competitions, Contracts, etc.

For some contracts still open, but not included in this List, see previous issues. **Those with an asterisk (*) are advertised in this number:** Competitions, iv.; Contracts, vi.; Public Appointments, —; Auction Sales, xvi. Certain conditions beyond those given in the following information are imposed in some cases, such as: the advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

*** It must be understood that the following paragraphs are printed as news, and not as advertisements; and that while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur.

Competition.

* NOVEMBER 30.—**York.**—TOWN PLANNING.—The Town Planning Committee of the York Corporation invite competitive schemes under the Housing and Town Planning, etc., Act, 1909, in connection with certain areas within and without the city.

Contracts.

BUILDING AND PAINTING.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

AUGUST 23.—**Dewsbury.**—ADDITIONS.—Additions to Carr Mills, Dewsbury. Particulars of Mr. W. A. Kendall, architect, Ossett.

AUGUST 23.—**Horbury.**—HOUSES.—Erection of six houses in Westfield-road, Horbury. Quantities of Messrs. Kirk, Sons, & Ridgway, architects, Market-place, Dewsbury.

AUGUST 23.—**Huddersfield.**—ALTERATIONS.—For alterations to bakehouse at Deadwaters, for the Huddersfield Industrial Society, Ltd. Quantities of Messrs. Joseph Berry & Sons, architects, 3, Market-place, Huddersfield.

AUGUST 23.—**Plymouth.**—PAINTING.—Repainting three fire escapes at the Central Police Station. Specifications at the Central Police Station.

AUGUST 23.—**Pontypandy.**—HOUSES.—Erection of thirty-two houses, roads, and sewers at Pontypandy, Caerphilly, for the Pontypandy Building Company. Specifications of Mr. W. Dowdeswell, architect, London House, Treharris.

AUGUST 24.—**Hindley.**—VARIOUS.—For excavating, concreting, and brickwork at the Gas Works of the Hindley U.D.C. Particulars of Mr. H .O. Timmins, Engineer, Gas Works, Hindley.

AUGUST 24.—**Ripon.**—BATHS.—Erection of new baths at the Spa Baths, Park-street. Specifications from Mr. C. Vawser, City Surveyor, Town Hall.

AUGUST 25.—**Morley.**—PREMISES, ETC.—Erection of two-story mill premises, engine-house, and boiler-house, engine bed, and two-story warehouse, at Perseverance Mills, Morley, for Messrs. A. Marshall & Son, Ltd. Quantities of Mr. T. A. Buttery, architect, Queen-street, Morley.

AUGUST 26.—**Cavan.**—ADDITIONS.—Building an addition to dormitory at Cavan Station for the Midland Great Western Railway of Ireland. Specification of Mr. Wm. Purcell O'Neill, Chief Engineer of the Company, Broadstone Terminus, Dublin. Charge, 2s. 6d.

AUGUST 28.—**Falmouth.**—HOUSE.—Erection of a new residence in Cliff-road, Falmouth. Specifications of Mr. A. J. Cornelius, M.S.A., architect, Truro.

AUGUST 31.—**Carnarvon.**—ALTERATIONS.—For renovations and sanitary work at Llwyndw-Bach, Penygroes, for Capt. John Jones, Carnarvon. Specifications of Mr. W. Glanfor Thomas, architect, Castle-buildings, Carnarvon.

AUGUST 31.—**Curragh.**—REPAIRS, ETC.—For War Department contract for works, repairs, and materials for the unexpired portion of a triennial contract, from September 13, 1915, to March 31, 1917, for Birr and out stations. Forms of tender at the Royal Engineer Office, Curragh Camp.

SEPTEMBER 4.—**Derbyshire.**—ADDITIONS.—The North Derbyshire Hospital Committee invite tenders for the erection of additions to the administrative blocks at each of their district hospitals, viz., Morton, Langwith, Mastin Moor, and Dronfield. Quantities of Mr. T. S. Wilcockson, architect, Knifesmith-gate, Chesterfield. Deposit, £1 1s.

SEPTEMBER 4.—**Lewisham.**—BRIDGE.—For the reinforcement with steel and concrete of the existing footbridge over the London, Brighton, and South Coast Railway at Sydenham Park, Sydenham. Specification at the Town Hall, Catford (Surveyor's Department).

NO DATE.—**Market Harborough.**—EXTENSION.—The Market Harborough Co-operative Society, Ltd., invite applications from builders desirous of tendering for extension of drapery premises. Names to the Architect's Department, Co-operative Wholesale Society, Ltd., 1, Balloon-street, Manchester. Deposit, £1 1s.

FURNITURE, MATERIALS, etc.

AUGUST 23.—**London.**—BUILDERS' IRONMONGERY.—Supply to the Commissioners of his Majesty's Works, etc., of builders' ironmongery as follows:—(*a*) Brassfoundry; (*b*) locks and latches; (*c*) cast, malleable, wrought iron, and steel goods. Forms of tender of the Controller of Supplies, H.M. Office of Works, 18, Queen Anne's-gate, Westminster, S.W.

AUGUST 28.—**East Dereham.**—GRANITE.—Supply to the U.D.C. of 1,000 tons of granite. Forms of tender of Mr. F. C. Burch, surveyor, Council Office, Dereham.

AUGUST 28.—**Valladolid.**—STREET WATERING VEHICLE.—Supply to the municipal authorities of Valladolid, Spain, of a motor street watering vehicle, not to cost more than £1,120. Copy of *Gaceta de Madrid* at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

AUGUST 31.—**South Mimms.**—MATERIALS.—Supply to the South Mimms R.D.C. of 500 tons of Leicestershire or other granite, 150 tons of ¾-in. chippings, 500 tons of black furnace slag, 500 tons of gravel, 6,000 gallons of distilled tar, etc. Forms of tender from the Surveyor.

SEPTEMBER 2.—**Leytonstone.**—MATERIALS.—Supply to the West Ham R.G. of electrical fittings, building materials, oils, paints, etc. Forms of tender of Mr. T. Smith, Clerk, Board Room, Union-road, Leytonstone.

SEPTEMBER 8.—**Aberdare.**—MATERIALS.—Supply to the directors of the Powell Duffryn Steam Coal Company, Ltd., of various stores. Forms of tender of the Stores Manager, Aberaman Offices, near Aberdare.

SEPTEMBER 23.—**Sydney.**—ELECTRIC LAMPS.—Supply of electric incandescent lamps to the Deputy Postmaster-General, Sydney, Australia. Copy of specifications at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

ENGINEERING, IRON, AND STEEL.

AUGUST 25.—**Manchester.**—HEATING APPARATUS.—Providing and fixing low-pressure heating apparatus at the Old Hall-drive Municipal School, Gorton, Manchester, for the Manchester E.C. Quantities at the Education Offices, Deansgate, Manchester. Deposit, £1 1s.

AUGUST 31.—**Spain.**—BREAKWATER.—Tenders will be received at the Dirreción General de Obras Públicas, Ministerio de Fomento, Madrid, for the construction of a breakwater at the port of Deva, Province of Guipúzcoa, at an estimated cost of 397,061 pesetas (about £15,900). Copy of *Gaceta de Madrid* at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

AUGUST 31.—**Spain.**—PORT IMPROVEMENT.—The *Gaceta de Madrid* states that tenders are invited for the execution of port extension and improvement works at Bermeo, Province of Vizcaya, at an estimated cost of 1,157,116 pesetas (about £46,300). Copy of *Gaceta* at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 2.—**London.**—TUBES.—Supply to the Commissioners of His Majesty's Works, etc., of steam tubes and fittings. Forms of tender of the Controller of Supplies, H.M. Office of Works, 18, Queen Anne's-gate, Westminster, S.W.

SEPTEMBER 2.—**Spain.**—QUAYS.—The *Gaceta de Madrid* states that tenders are invited for the construction of quays in the east dock of the port of Tarradona, at an estimated cost of 1,312,385 pesetas (about £52,500). Copy of *Gaceta* at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 23.—**Sydney.**—TELEGRAPH INSTRUMENTS.—Supply to the Deputy Postmaster-General, Sydney, Australia, of telegraph instruments. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 25.—**Johannesburg.**—ALTERNATORS.—Supply to the Municipal Council of two 3,000 k.w. turbo alternators and accessories. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

NO DATE.—**Rochdale.**—TRANSFORMERS.—Supply to the Rochdale Electrical Engineer's Department of static transformers for a period of twelve months. Particulars of Mr. C. C. Atchison, Electricity Works, Dane-street, Rochdale.

ROAD, SANITARY, AND WATER WORKS.

AUGUST 24.—**Gosforth.**—STREET WORKS.—Making-up the northern portion of the back street between Rothwell-road and High-street, and footway improvement in Rothwell-road, for the Gosforth U.D.C. Quantities of the Engineer, Mr Geo. Nelson, Council-chambers, High-street, Gosforth.

AUGUST 30.—**Dartford.**—ROADS.—(*a*) Supply to the R.D.C. of 4,770 tons of broken hard stone; (*b*) steam rolling. Forms of tender of Mr. J. Hookins, Surveyor, Gartly, Dartford.

Auction Sales.

* AUGUST 24.—**Maidenhead.**—Mr. H. W. Smith will sell by auction, at Altwood Works, Litle-row, Maidenhead Thicket, the stock, plant, and rolling stock of a builder, contractor, and saw mill proprietor.

* AUGUST 24.—**Tooting.**—Messrs. Joseph Hibbard & Sons will sell by auction, on the premises, Allen Works, adjoining No. 1, Blackshaw-road, near Garratt-lane, Tooting, S.W., a builder's plant.

* AUGUST 25.—Messrs. Churchill & Sim will sell by auction, at the Great Hall, Winchester House, Old Broad-street, E.C., an assortment of deals, battens, boards, timbers, etc.

FIRE-RESISTING GLAZING.

THE British Fire Prevention Committee have issued as "Red Book" No. 198 the report of a test with three window openings, filled with Messrs. Pilkington Brothers, Ltd., wired glass, which were subjected to the Committee's standard sixty-minute test at temperatures reaching up to 1,600 deg. Fahr., followed by the application of water under pressure. Whilst as a rule the Committee's standard tests for glazing are with glazing panels measuring about 2 ft. by 2 ft., one of the panels under test in this case measured about 3 ft. by 2 ft.—*i.e.*, was of a size materially in excess of the present maximum size generally allowed for fire-resisting glazing.

The classification of Temporary Protection (Class B) under the Committee's standards has been accorded for this glazing to this larger size, but it should be borne in mind that an earlier Report (No. 197) described tests with wired glazing by the same makers of ninety minutes' duration, whereby a higher classification—*i.e.*, that of Partial Protection (Class A)—was obtained for the regulation sizes and for a panel measuring about 4 ft. by 1 ft. Full details of the test are given in the Committee's Report, copies of which are obtainable upon written application to the registrar (2s. 6d.).

The investigation was carried out under the Committee's usual procedure by a special Sub-Committee of eight surveyors and fire-brigade officers, the Committee's Council being represented by the Earl of Londesborough, and the officials present including representatives from the principal Government Departments concerned.

[Those with an asterisk (*) are advertised in this issue.]

PRICES CURRENT OF MATERIALS.

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.]

Since our last issue there has been an increase in metal prices and a reduction in lead and tin.—ED.

*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

Per 1000 Alongside, in River Thames.	£ s. d.
Best Stocks	2 0 0
Picked Stocks for Facings	2 15 0

Per 1000, Delivered at Railway Depôt, London.

	£ s. d.		£ s. d.
Flettons	1 16 0	Best Blue Pressed Staffordshire	3 15 0
Best Fareham Red	3 12 0	Do. Bullnose	4 0 0
Best Red Pressed Ruabon Facing	5 0 0	Best Stourbridge Fire Bricks	4 0 0
GLAZED BRICKS—			
Best White, Ivory, and Salt Glazed Stretchers	13 0 0	D'ble Str'tch'rs	18 10 0
Headers	12 10 0	Double Headers	15 10 0
Quoins, Bullnose and 4½ in. Flats	16 10 0	One Side and two Ends	19 10 0
		Two Sides and one End	20 10 0
		Splays and Squints	18 0 0

Second Quality £1 10s. per 1000 less than best.

	s. d.	
Thames and Pit Sand	7 9	per yard, delivered.
Thames Ballast	6 6	„ „ „

Per ton, delivered.

	£ s. d.		£ s. d.
Best Portland Cement	2 4 0	..	2 8 0
Best Ground Blue Lias Lime	1 1 0	..	—

NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime	15s. 6d. per yard delivered.
Stourbridge Fireclay in s'cks	35s. 0d. per ton at rly. dpt.

STONE.

Per Ft. Cube.

	s. d.
BATH STONE—delivered on road waggons, Paddington Depôt	1 7
Do. do. delivered on road waggons, Nine Elms Depôt	1 8½
PORTLAND STONE (20 ft. average)—	
Brown Whitbed, delivered on road waggons, Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2 5½
White Basebed, delivered on road waggons, Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2 7½

Per Ft. Cube, delivered at Railway Depôt.

	s. d.		s. d.
Ancaster in blocks..	1 11	Closeburn Red Freestone	2 2
Beer in blocks	1 7	Red Mansfield Freestone	2 6
Greenshill in blocks	2 0	Talacre & Gwespyr Stone	2 6
Darley Dale in blocks	2 6		
Red Corsehill in blocks	2 6		

YORK STONE—*Robin Hood Quality.*

Per Ft. Cube, Delivered at Railway Depôt.	s. d.
Scappled random blocks	2 10
Per Ft. Super., Delivered at Railway Depôt.	
6 in. sawn two sides landings to sizes (under 40 ft. super.)	2 8
6 in. rubbed two sides ditto, ditto	2 6
3 in. sawn two sides slabs (random sizes)	0 11½
2 in. to 2½ in. sawn one side slabs (random sizes)	0 7
1½ in. to 2 in. ditto, ditto	0 6
HARD YORK—	
Per Ft. Cube, Delivered at Railway Depôt.	
Scappled random blocks	3 0
Per Ft. Super., Delivered at Railway Depôt.	
6 in. sawn two sides landing to sizes (under 40 ft. super.)	2 8
6 in. rubbed two sides ditto	3 0
2 in. sawn two sides slabs (random sizes)	1 2
8 in. self-faced random flags	0 5

TILES.

	Per 1000 f.o.r. London. £ s. d.
Best machine-made tiles or hand-made sand-faced tiles from either Broseley or Staffordshire district	2 12 6
Ornamental ditto	2 15 0
Hip and valley tiles (per dozen)	0 5 6

SLATES.

	Per 1000 of 1200 f.o.r. London. £ s. d.
Best Blue Bangor slates, 20 by 10	11 5 0
First quality „ „	11 0 0
„ „ 16 by 8	5 10 0
Best Blue Portmadoc, 20 by 10	11 2 6
First quality „ „	10 12 6
„ „ 16 by 8	5 10 0

WOOD.

BUILDING WOOD.	At per standard. £ s. d.		£ s. d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in.	21 10 0	..	22 0 0
Deals: best 3 in. by 9 in. 2 in. by 11 in.	21 0 0	..	22 0 0
	23 0 0	..	23 10 0
Battens: best 2½ in. by 7 in. and 8 in., and 3 in. by 7 in. and 8 in.	19 10 0	..	20 10 0
Battens: best 2½ in. by 6 in. and 3 in. by 6 in.	0 10 0	less than 7 in. and 8 in.	
2 in. by 7 in.	20 0 0	..	—
3 in. by 4 in.	21 0 0	..	—
2 in. by 4½ in.	22 10 0	..	—
3 in. by 4½ in.	21 10 0	..	—

WOOD (*Continued*).

BUILDING WOOD (*Continued*)—	At per standard. £ s. d.		£ s. d.
Deals: seconds	1 0 0	less than best	
Battens: seconds	0 10 0	„ „ „	
2 in. by 4in. and 2 in. by 6 in.	18 10 0	..	19 10 0
2 in. by 4½ in. and 2 in. by 5 in.	16 10 0	..	17 0 0
Foreign Sawn Boards—			
1 in. and 1¼ in. by 7 in.	0 10 0	more than battens.	
¾ in.	1 0 0	„	
Fir timber: best middling	At per load of 50 ft.		
Memel (average specification)	6 15 0	..	7 15 0
Seconds	6 0 0	..	6 10 0
Small timber (8 in. to 10 in.)	5 5 0	..	5 10 0
Small timber (6 in. to 8 in.)	4 10 0	..	5 0 6
Swedish balks	4 0 0	..	4 10 0
Pitch-pine timber (30 ft. average)	8 5 0	..	9 0 0
JOINERS' WOOD.	At per standard.		
White Sea: first yellow deals, 3 in. by 11 in.	33 15 0	..	35 0 0
Battens, 2½ in. and 3 in. by 7 in.	23 7 6	..	24 7 6
Second yellow deals, 3 in. by 11 in.	27 5 0	..	28 5 0
Do. 3 in. by 9 in.	25 5 0	..	26 5 0
Battens, 2½ in. and 3 in. by 7 in.	20 0 0	..	21 0 0
Third yellow deals, 3 in. by 11 in. and 9 in.	20 2 6	..	21 2 6
Battens, 2½ in. and 3 in. by 7 in.	19 0 0	..	20 0 0
Petrograd: first yellow deals, 3 in. by 11 in.	29 10 0	..	31 0 0
Do. 3 in. by 9 in.	25 5 0	..	26 5 0
Battens	19 5 0	..	20 5 0
Second yellow deals, 3 in. by 11 in.	21 10 0	..	23 0 0
Do. 3 in. by 9 in.	20 15 0	..	21 10 0
Battens	19 10 0	..	20 0 0
Third yellow deals, 3 in. by 11 in. / Do. 3 in. by 9 in.	19 10 0	..	—
Battens	19 0 0	..	19 10 0
White Sea and Petrograd—			
First white deals, 3 in. by 11 in.	22 10 0	..	24 0 0
First white deals, 3 in. by 9 in.	21 0 0	..	22 10 0
Battens	18 10 0	..	19 0 0
Second white deals, 3 in. by 11 in.	20 0 0	..	21 0 0
Second white deals, 3 in. by 9 in.	19 0 0	..	20 0 0
Battens	18 0 0	..	18 10 0
Pitch-pine deals	34 0 0	..	35 0 0
Under 2 in. thick extra	0 10 0	..	1 0 0
Columbian or Oregon Pine, best quality	28 0 0	..	29 0 0
Yellow Pine—First, regular sizes	57 0 0	upwards.	
Oddments	39 0 0	„	
Seconds, regular sizes	43 10 0	„	
Oddments	37 0 0	„	
Kauri Pine—Planks per ft. cube	0 7 6	..	—
Oak Logs—			
Large, per ft. cube	0 5 6	..	0 6 6
Small „ „	0 4 6	..	0 5 5
Wainscot Oak Logs, per ft. cub	0 10 6	..	0 12 6
Dry Wainscot Oak, per ft. super, as inch	0 1 0	..	0 1 3
¾ in. do. do.	0 0 10	..	0 1 0
Dry Mahogany—Honduras, Tabasco, per ft. super, as inch	0 1 0	..	0 1 4
Selected, Figury, per ft. super, as inch	0 1 6	..	0 2 6
Cuba Mahogany	0 1 6	..	0 2 6
Dry Walnut, American, per ft. super, as inch	0 1 0	upwards. ..	0 1 3
French, "Italian," Walnut	0 1 0	..	0 1 6
Teak, per load (Rangoon or Moulmein)	28 0 0	..	34 0 0
Do. do. (Java)	24 0 0	..	27 0 0
American Whitewood planks, per ft. cube	0 6 6	..	0 7 6
Prepared flooring, etc.—	Per square.		
1 in. by 7 in. yellow, planed and shot	0 18 0	..	1 0 0
1 in. by 7 in. yellow, planed and matched	0 18 0	..	1 0 0
1¼ in. by 7 in. yellow, planed and matched	1 2 0	..	1 5 0
1 in. by 7 in. white, planed and shot	0 17 6	..	1 0 0
1 in. by 7 in. white, planed and matched	0 18 0	..	1 0 0
1¼ in. by 7 in. white, planed and matched	1 2 0	..	1 5 0
¾ in. by 7 in. yellow, matched and beaded, or V-jointed boards	0 14 6	..	0 16 6
1 in. by 7 in. „ „	0 18 6	..	1 1 0
¾ in. by 7 in. white „	0 14 6	..	0 16 6
1 in. by 7 in. „ „	0 18 6	..	1 1 0

6 in. at 6d. to 9d. per square less than 7 in.

METALS.

JOISTS, GIRDERS, &c.

	In London or delivered Railway Vans, per ton. £ s. d.		£ s. d.
Rolled Steel Joists, ordinary sections	13 10 0	..	14 10 0
Compound Girders, ordinary Sections	16 0 0	..	17 0 0
Steel Compound Stanchions	16 10 0	..	17 10 0
Angles, Tees, and Channels, ordinary sections	15 0 0	..	15 10 0
Flitch Plates	15 0 0	..	15 10 0
Cast Iron Columns and Stanchions, including ordinary patterns	12 0 0	..	12 10 0
IRON—	Per ton, in London.		
Common Bars	13 10 0	..	—
Staffordshire Crown Bars, good merchant quality	14 0 0	..	14 10 0
Staffordshire "Marked Bars"	14 10 0	..	15 0 0

METALS (*Continued*).

IRON (*Continued*)—	Per ton, in London. £ s. d.		£ s. d.
Mild Steel Bars	14 0 0	..	14 10 0
Steel Bars, Ferro-Concrete quality, £15 basis price.			
Hoop Iron, basis price	15 0 0	..	—
„ „ Galvanised	27 10 0	..	—
(* And upwards, according to size and gauge.)			
Sheet Iron Black—			
Ordinary sizes to 20 g.	14 0 0	..	—
„ „ 24 g.	15 0 0	..	—
„ „ 26 g.	16 10 0	..	—
Sheet Iron, Galvanised flat, ordinary quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	24 10 0	..	—
Ordinary sizes to 22 g. and 24 g.	25 10 0	..	—
Ordinary sizes to 26 g.	26 10 0	..	—
Sheet Iron, Galvanised, flat, best quality—			
Ordinary sizes to 20 g.	26 10 0	..	—
„ „ 22 g. and 24 g.	27 0 0	..	—
Ordinary sizes to 26 g.	27 10 0	..	—
Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 8 ft. 20 g.	24 10 0	..	—
Ordinary sizes, 22 g. and 24 g.	25 0 0	..	—
Ordinary sizes, 26 g.	25 10 0	..	—
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	16 10 0	..	—
Best Soft Steel Sheets, 22 g. & 24 g.	17 0 0	..	—
Best Soft Steel Sheets, 26 g.	18 10 0	..	—
Cut Nails, 3 in. to 6 in.	15 0 0	..	15 10 0

(Under 3 in., usual trade extras.)

LEAD, &c.

Delivered in London.

	£ s. d.	
LEAD—Sheet, English, 4 lb. and up	28 0 0	.. —
Pipe in coils	28 10 0	.. —
Soil pipe	31 10 0	.. —
Compo pipe	31 10 0	.. —

NOTE—Country delivery 15s. per ton extra; lots under 5 cwt. 1s. per cwt. extra.

COPPER—		
Strong Sheet	per lb.	0 1 5 .. —
Thin „	„	0 1 6 .. —
Copper nails	„	0 1 5 .. —
Copper wire	„	0 1 5 .. —
BRASS—		
Strong Sheet	„	0 1 3 .. —
Thin	„	0 1 4 .. —
TIN—English Ingots	„	0 1 7 .. —
SOLDER—Plumbers'	„	0 0 8 .. —
Tinmen's	„	0 0 11 .. —
Blowpipe	„	0 1 1 .. —

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES AND IN SQUARES IN ORDINARY SIZES.

Per Ft.

21 oz. thirds	5½d.	32 oz. thirds	8½d.
„ fourths	5d.	„ fourths	7d.
26 oz. thirds	6½d.	Fluted Sheet, 15 oz.	5½d.
„ fourths	5½d.	„ 21 oz.	6½d.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

Per Ft.

¼ Rolled plate	3½d.
5/16 Rough rolled and rough cast plate	3½d.
½ Rough rolled and rough cast plate	4d.
Figured Rolled, Oxford Rolled, Oceanic, Arctic, Muffled, and Rolled Cathedral, white	4½d.
Ditto, tinted	6d.
Rolled Sheet	3½d.

OILS, &c.

		£ s. d.
Raw Linseed Oil in pipes	per gallon	0 2 3
„ „ „ in barrels	„	0 2 4
„ „ „ in drums	„	0 2 7
Boiled „ „ in barrels	„	0 2 6
„ „ „ in drums	„	0 2 10
Turpentine in barrels	„	0 2 11
„ in drums	„	0 3 2
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)		38 10 0
Red Lead, Dry	per ton	40 0 0
Best Linseed Oil Putty	per cwt.	0 10 0
Stockholm Tar	per barrel	1 12 0

GENUINE WHITE LEAD PAINT—

Blackfriars, Nine Elms, or Park, etc., brands (in 14 lb. tins), not less than 5 cwt. lots ..... per ton delivered 36 15 0

VARNISHES, &c.

	Per gallon. £ s. d.
Fine Pale Oak Varnish	0 8 0
Pale Copal Oak	0 10 6
Superfine Pale Elastic Oak	0 12 6
Fine Extra Hard Church Oak	0 10 0
Superfine Hard-drying Oak, for seats of Churches	0 14 6
Fine Elastic Carriage	0 12 9
Superfine Pale Elastic Carriage	0 16 0
Fine Pale Maple	0 10 0
Finest Pale Durable Copal	0 18 6
Extra Pale French Oil	1 1 0
Eggshell Flatting Varnish	0 18 0
White Pale Enamel	1 4 0
Extra Pale Paper	0 12 0
Best Japan Gold Size	0 10 0
Best Black Japan	0 16 0
Oak and Mahogany Stain	0 9 0
Brunswick Black	0 8 0
Berlin Black	0 16 0
Knotting	0 10 0
French and Brush Polish	0 19 6

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.]

TO CORRESPONDENTS.

NOTE.—All communications with respect to literary and artistic matters should be addressed to "THE EDITOR" (and not to any person by name); those relating to advertisements and other exclusively business matters should be addressed to THE BUILDER LTD., and *not* to the Editor.

All communications must be authenticated by the name and address of the sender, whether for publication or not. No notice can be taken of anonymous communications.

The responsibility of signed articles, letters, and papers read at meetings rests, of course, with the authors.

We cannot undertake to return rejected communications; and the Editor cannot be responsible for drawings, photographs, manuscripts, or other documents, or for models or samples sent to or left at this office, unless he has specially asked for them.

All drawings sent to or left at this office for consideration should bear the owner's name and address on either the face or back of the drawing. Delay and inconvenience may result from inattention to this.

Any commission to a contributor to write an article, or to execute or lend a drawing for publication, is given subject to the approval of the article or drawing, when received, by the Editor, who retains the right to reject it if unsatisfactory. The receipt by the author of a proof of an article in type does not necessarily imply its acceptance.

N.B.—Illustrations of the First Premiated Design in any important architectural competition will always be accepted for publication by the Editor, whether they have been formally asked for or not.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than* 2 *p.m. on Wednesday.* [N.B.—We cannot publish Tenders unless authenticated either by the architect or the building owner; and we cannot publish announcements of Tenders accepted unless the amount of the Tender is stated.]

• Denotes *accepted.* † Denotes *provisionally accepted.*

COCHNO.—For installation of four rapid gravity filters at Cochno, for the Clydebank and District Water Trustees :—

Paterson Engineering Co.* £3,485

EAST GRINSTEAD.—Extension of sewer at Forest-row, for the East Grinstead Rural District Council :—

H. & E. Waters* £160

FARRANFAD.—For erection and completion of a dwelling-house at Farranfad, for Mr. John Jennings. Mr. R. M'Cullen, C.E., Minerstown, Clough, Co. Down :—

H. L. Chambers	£979 0 0
H. Boyd	900 0 0
P. M'Aleenan	857 0 0
J. M'Aleenan, Castlewellan, Co. Down*	780 15 2

HARTISMERE.—Making-up roads at new infirmary, for the Board of Guardians :—

Edwards, Norwich* £331 15 6

LOUGHBOROUGH (Leics.).—For painting and cleaning at several schools, for the Loughborough Education Committee. Messrs. A. E. King & Co., architects, Baxter Gate, Loughborough :—

Cobden-street School.

G. Morgan, Freehold-street* £8 15 0

Church Gate School.

J. S. Hayes, Leicester-road* 47 10 6

Shakespeare-street School.

J. S. Hayes, Leicester-road* 11 16 0

Emmanuel Boys'.

E. Main, Wood Gate* 7 13 0

St. Mary's Boys'.

W. Main, Moor-lane* 10 18 6

St. Mary's Girls'.

W. Main, Moor-lane* 18 12 6

Warner School.

W. Sharpe, Caldwell-street* 28 10 0

Outbuildings of Remaining Schools.

F. Russell, Baxter Gate* 1 12 6

[All of Loughborough.]

NEWTON ABBOT.—For residence, Highweek, Newton Abbot, for Mr. Spencer Murrin. Mr. F. E. Lloyd Downes, architect, Newton Abbot :—

Parker Bros.	£820 0 0
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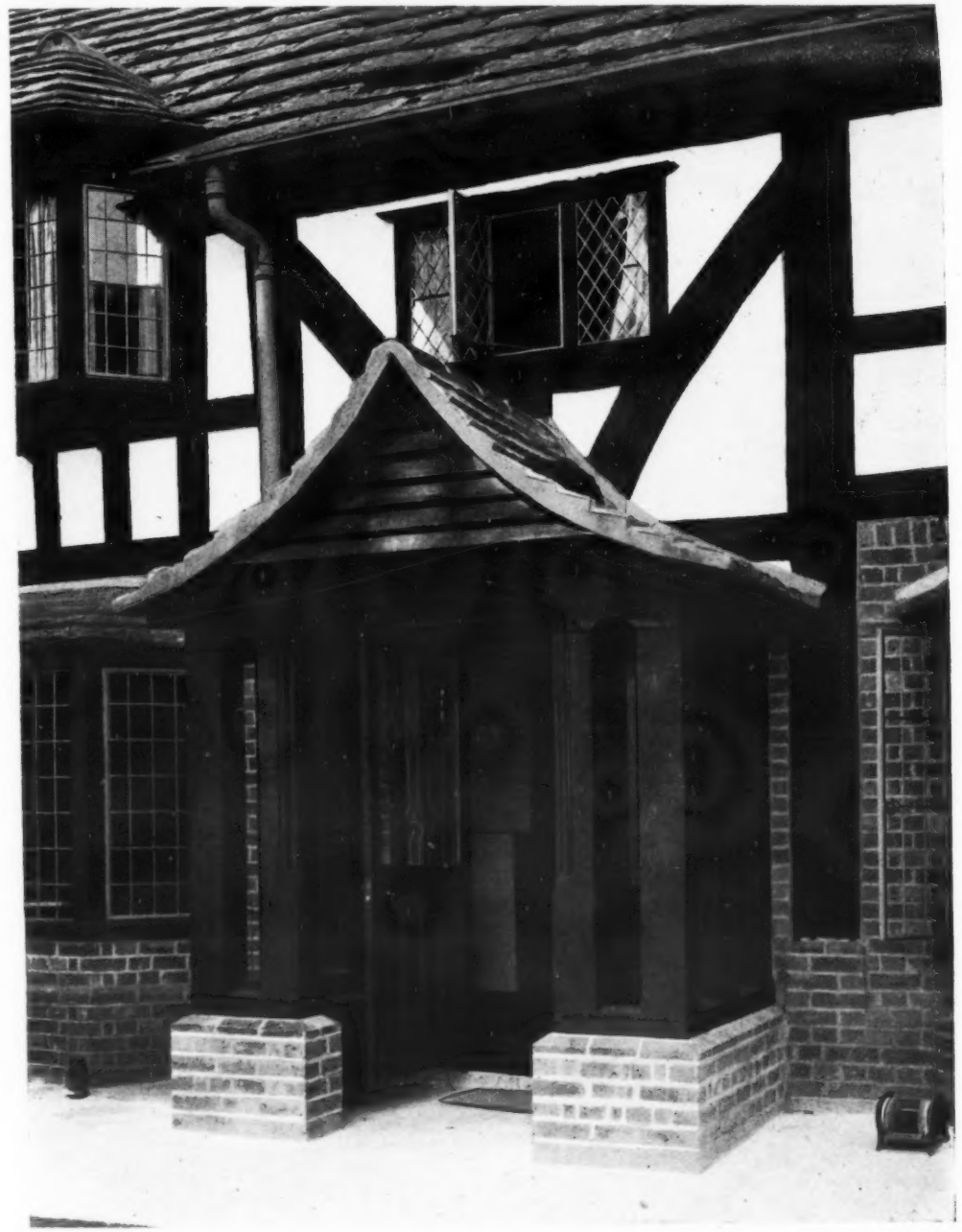

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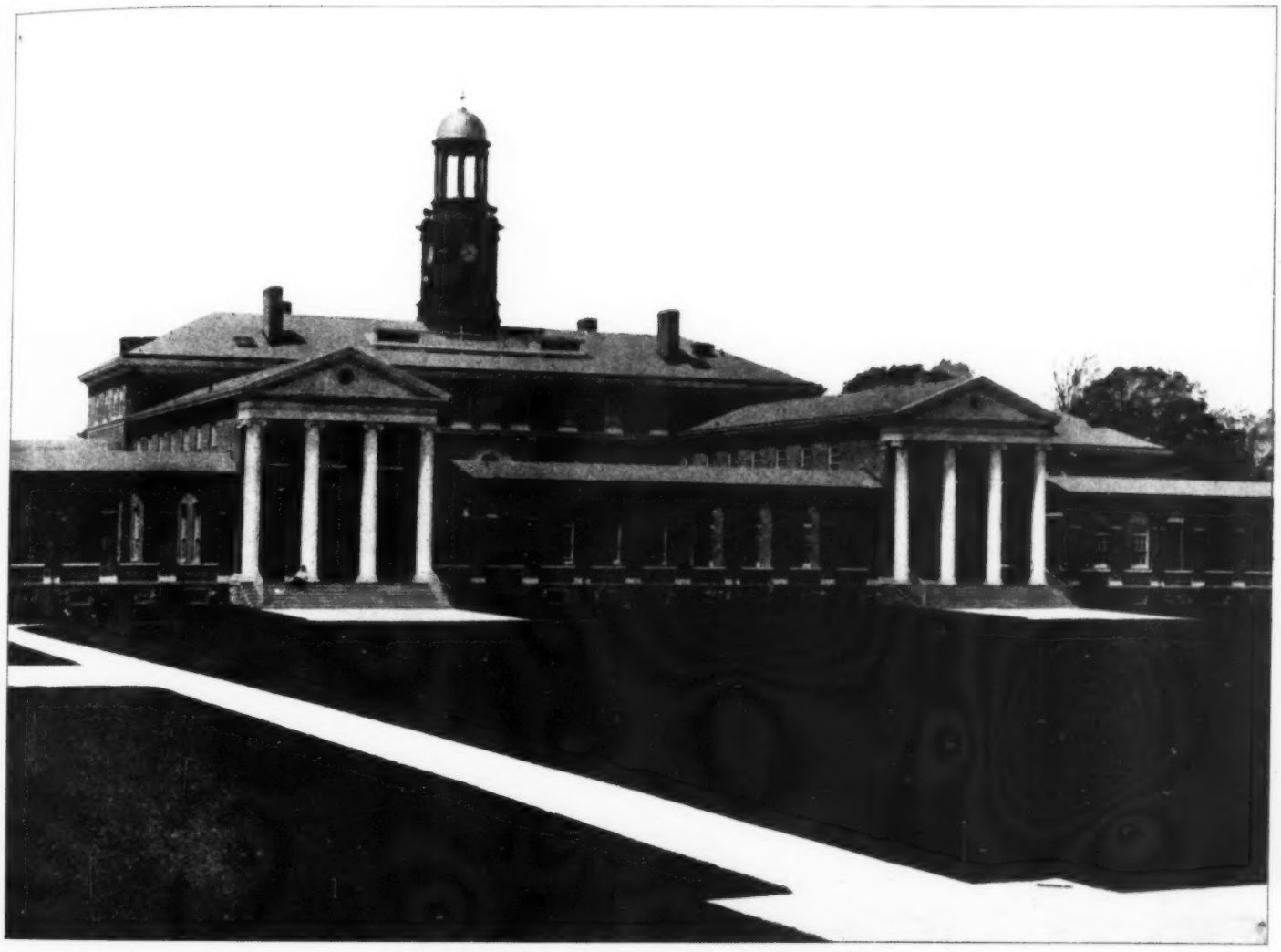

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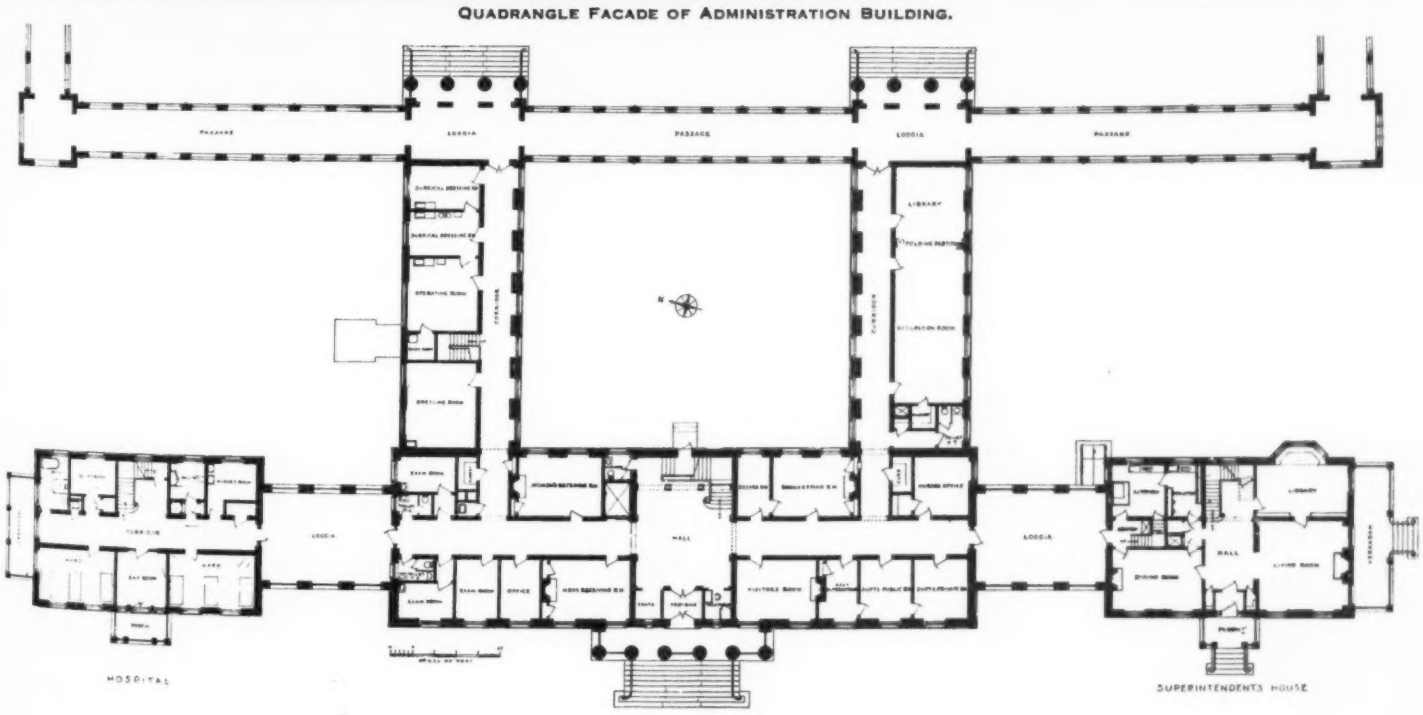

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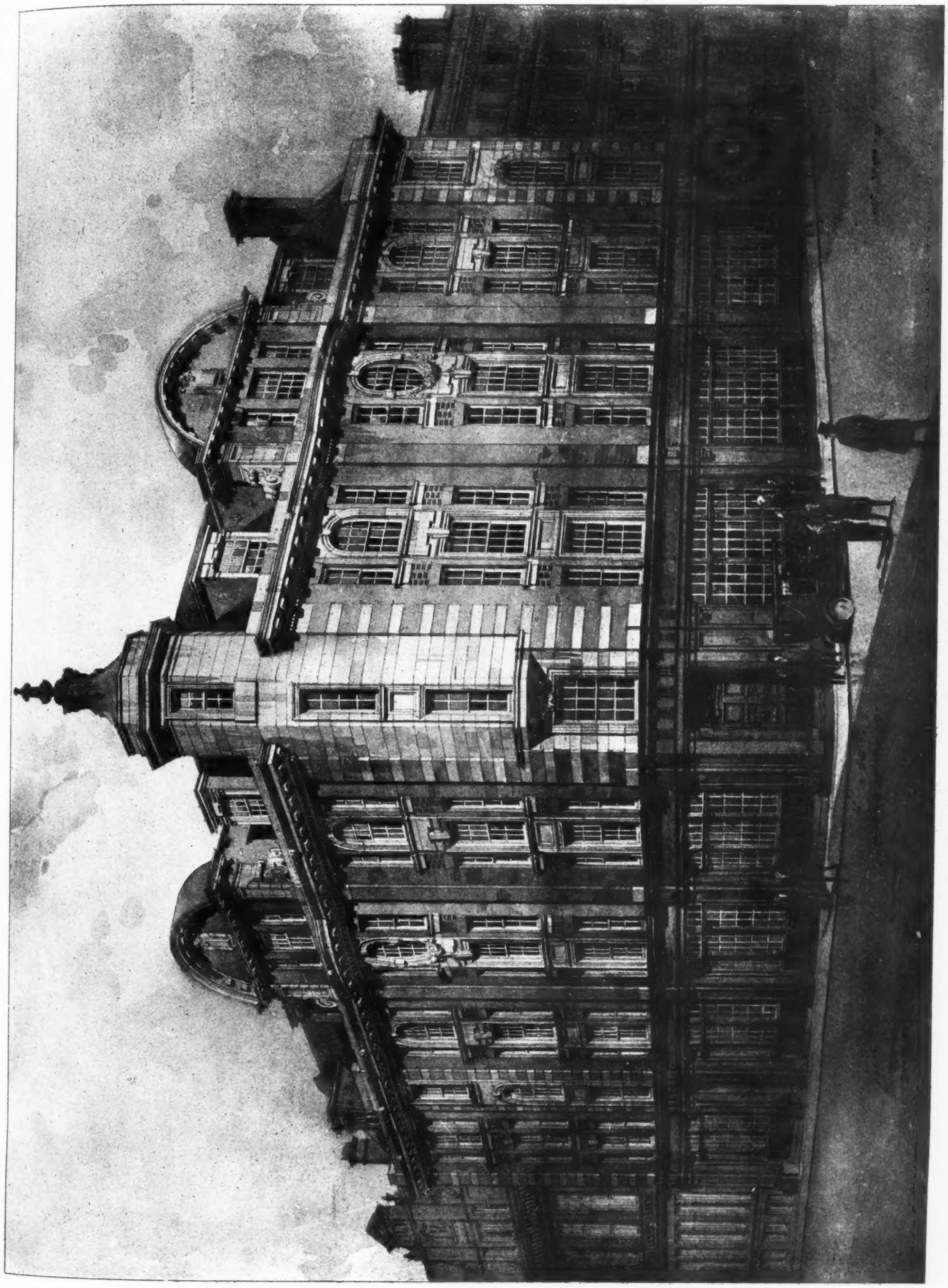

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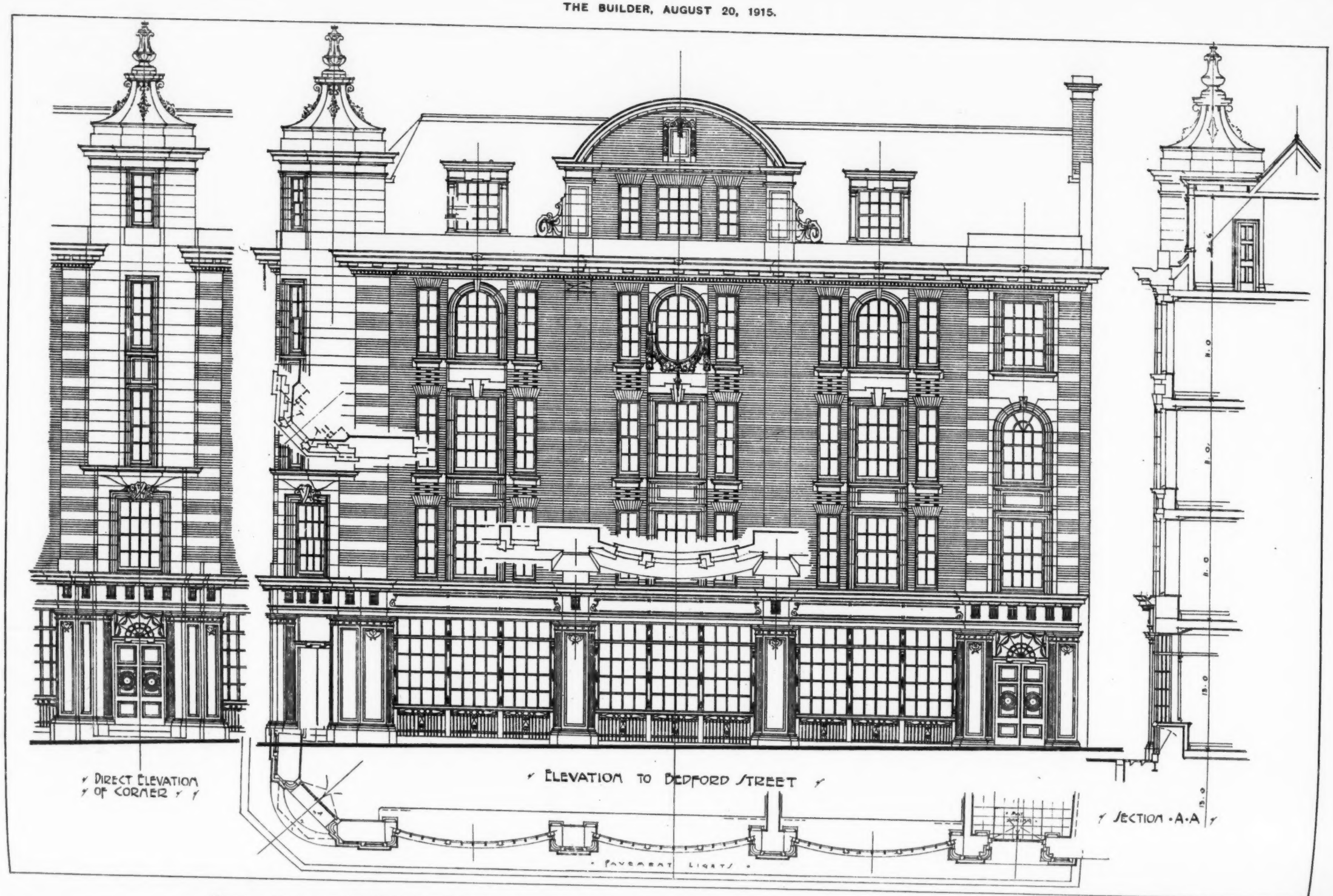

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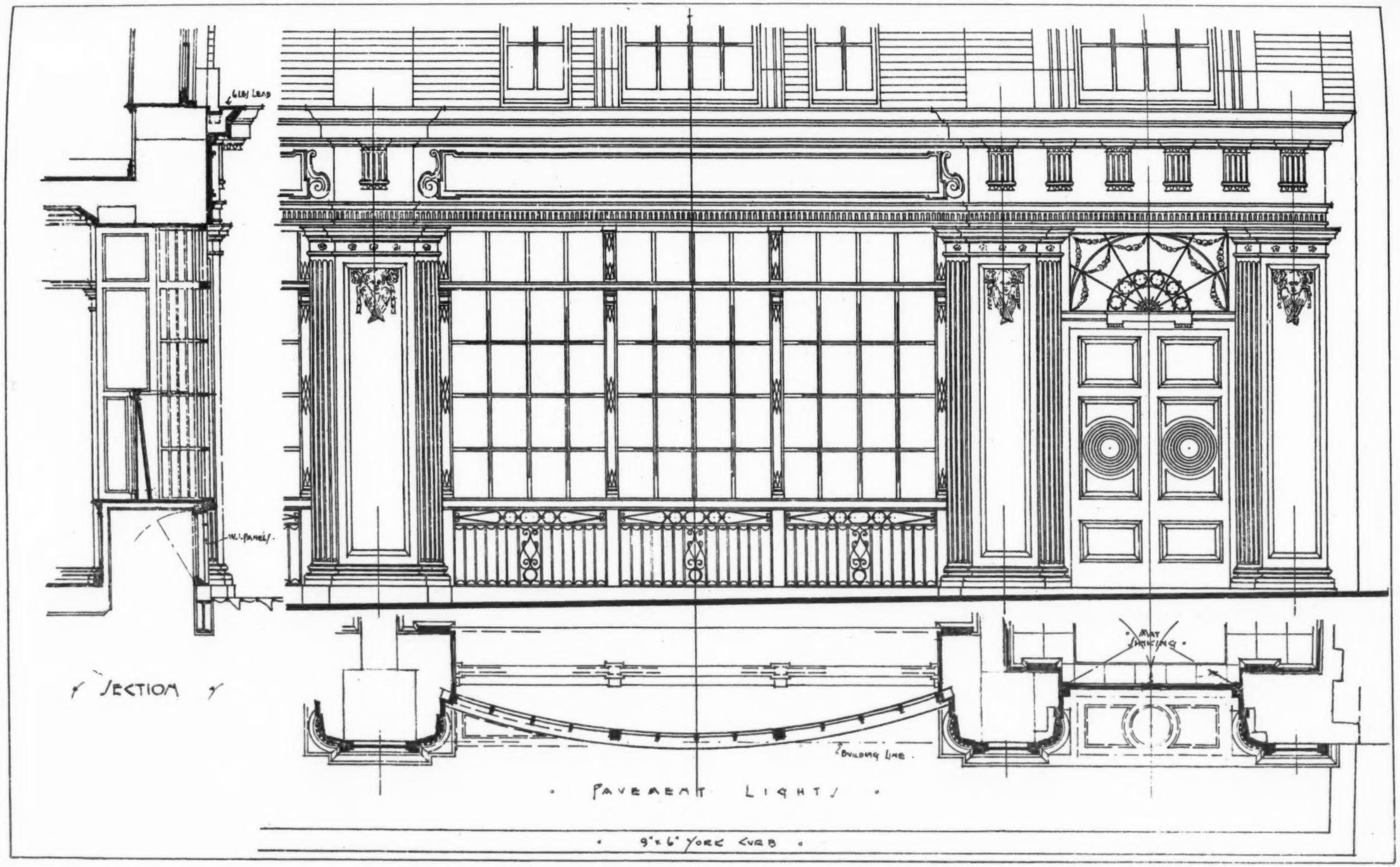

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